

2012 - JCR Evaluation Form

SPECIES: Elk
 HERD: EL104 - HOBACK
 HUNT AREAS: 86-87

PERIOD: 6/1/2012 - 5/31/2013
 PREPARED BY: DEAN CLAUSE

	<u>2007 - 2011 Average</u>	<u>2012</u>	<u>2013 Proposed</u>
Trend Count:	939	787	727
Harvest:	259	244	215
Hunters:	850	767	700
Hunter Success:	30%	32%	31%
Active Licenses:	859	32%	700
Active License Percentage:	30%	32%	31%
Recreation Days:	5,868	5,357	5,100
Days Per Animal:	22.7	22.0	23.7
Males per 100 Females:	19	17	
Juveniles per 100 Females	31	31	

Trend Based Objective ($\pm 20\%$) 1,100 (880 - 1320)

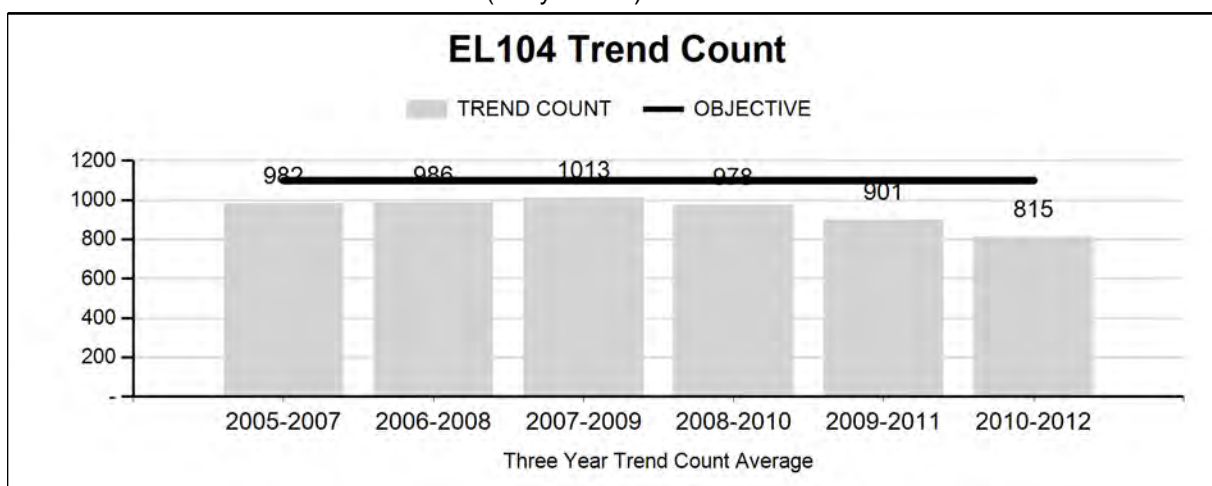
Management Strategy: Recreational

Percent population is above (+) or (-) objective: -28.5%

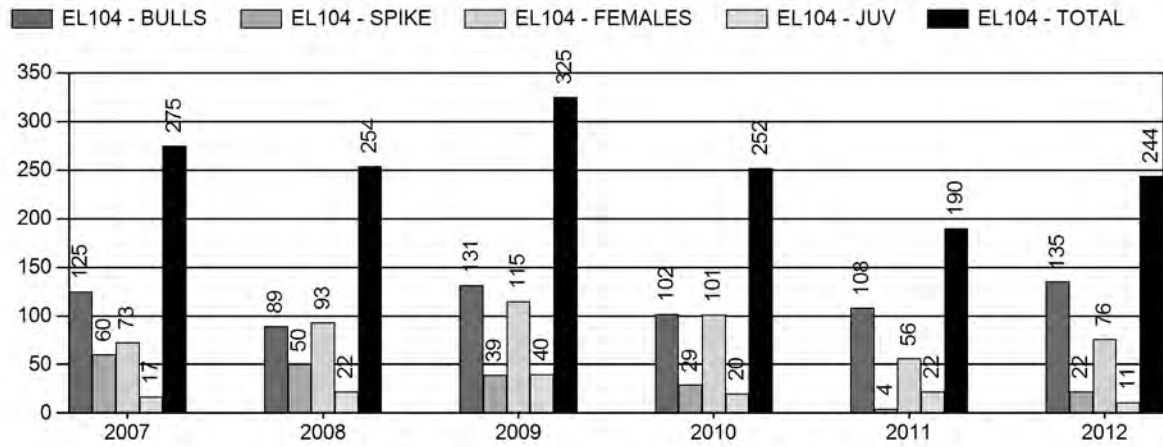
Number of years population has been + or - objective in recent trend: 3

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

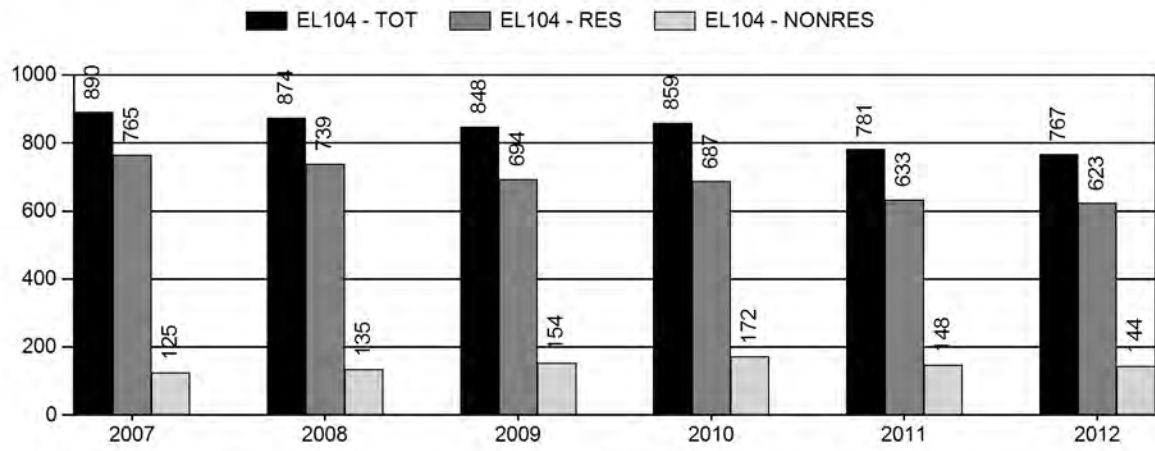
	<u>JCR Year</u>	<u>Proposed</u>
Females ≥ 1 year old:	0%	0%
Males ≥ 1 year old:	0%	0%
Juveniles (< 1 year old):	0%	0%



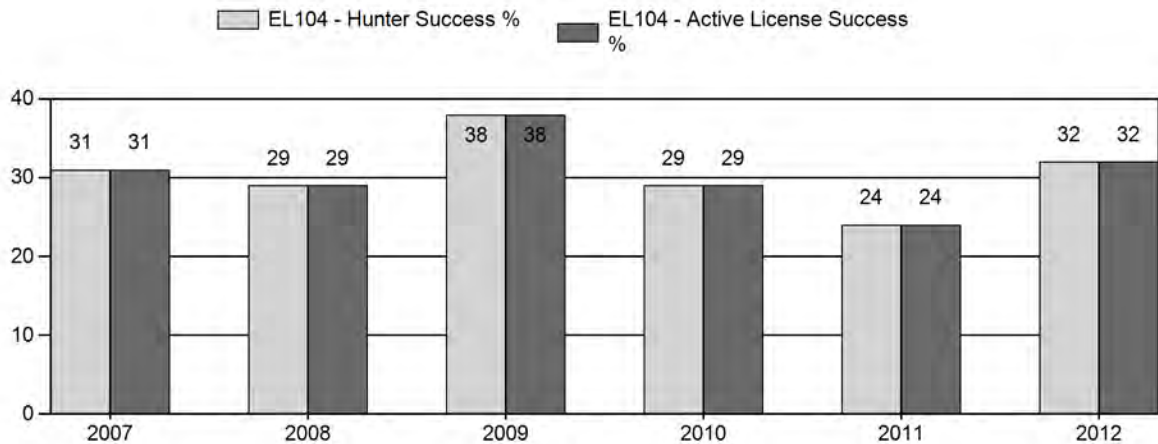
Harvest



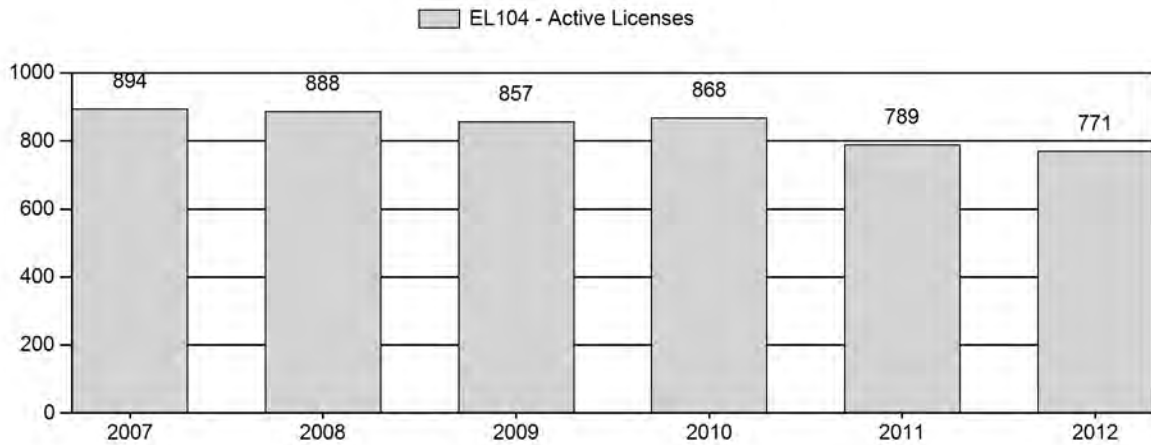
Number of Hunters



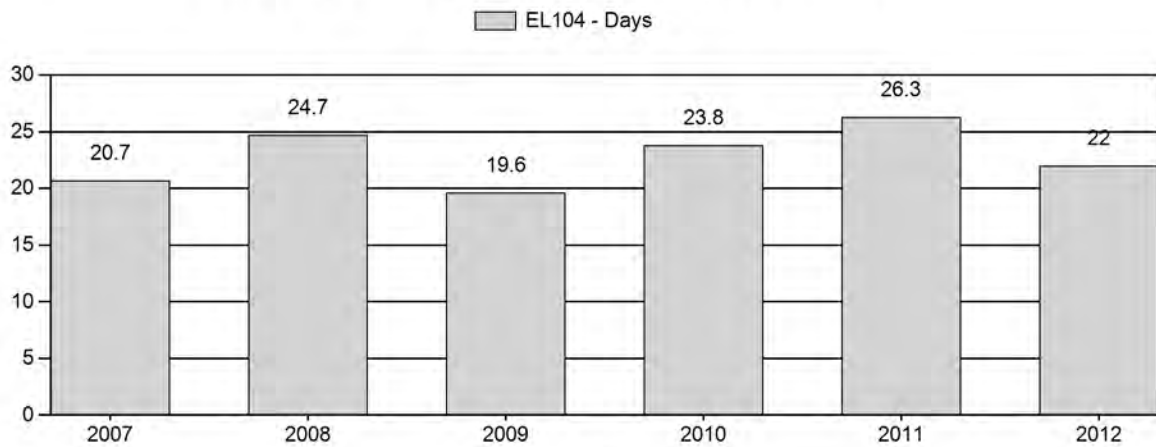
Harvest Success



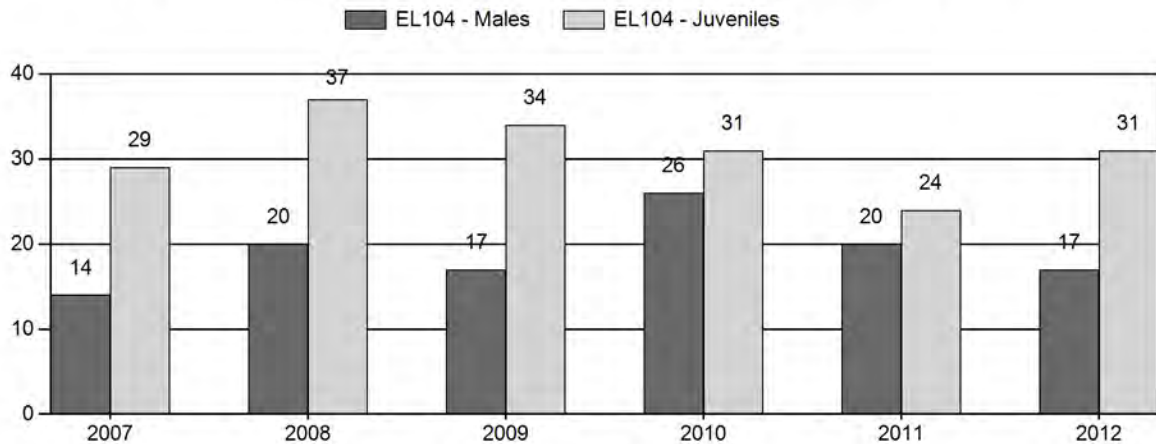
Active Licenses



Days per Animal Harvested



Postseason Animals per 100 Females



2007 - 2012 Postseason Classification Summary

for Elk Herd EL104 - HOBACK

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot Cts	Cls Obj	Males to 100 Females				Young to		
		Ylg	Adult	Total	%	Total	%	Total	%			Ylg	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2007	955	43	46	89	10%	635	70%	181	20%	905	360	7	7	14	± 0	29	± 0	25
2008	1,064	66	68	134	13%	655	63%	243	24%	1,032	353	10	10	20	± 0	37	± 0	31
2009	1,076	59	55	114	11%	670	66%	229	23%	1,013	319	9	8	17	± 0	34	± 0	29
2010	850	60	80	140	17%	533	64%	164	20%	837	281	11	15	26	± 0	31	± 0	24
2011	823	45	69	114	14%	573	70%	135	16%	822	204	8	12	20	± 0	24	± 0	20
2012	0	20	70	90	11%	533	68%	164	21%	787	0	4	13	17	± 0	31	± 0	26

2013 Seasons – Hoback Elk Herd Unit (EL104)

Hunt Area	Type	Opens	Closes	Quota	Limitations
86		Sept. 26	Oct. 31		General License; any elk
87		Oct. 15	Oct. 31		General License; any elk valid in that portion of Area 87 south of U.S Hwy 191.
		Oct. 15	Oct. 31		General License; antlered elk valid in that portion of Area 87 north of U.S Hwy 191.
	6	Nov. 19	Jan. 31	25	Limited Quota; 25 licenses cow or calf valid only in that portion of Area 87 south and east of Dell Creek, north and east of U.S. Highway 191, and west of the North Fork of Fisherman Creek.
Archery Seasons					
86		Sept. 1	Sept. 25		Refer to Section 3
87		Sept. 1	Sept. 30		Refer to Section 3

Hunt Area	License Type	Quota Changes from 2012
Herd Unit Total		No Changes

Management Evaluation

Current Mid-Winter Trend Count Management Objective: 1,100

Management Strategy: Recreational

2012 Trend Count: 787

Most Recent 3-year Running Average Trend Count: 815

The Hoback Herd Unit encompasses approximately 341 square miles of occupied elk habitat almost entirely within Sublette County. Hunt Areas 86 (Monument Ridge) and 87 (Raspberry Ridge) make up the Hoback Herd Unit. This herd unit is managed under a mid-winter trend objective of 1,100 (± 20%) with a herd estimate derived from a 3-year trend count average on

feedgrounds and native range combined. This herd is managed under “recreational” management, with a management objective for bull: 100 cow ratio between 15 to 29.

Herd Unit Issues

Managers believe a very high proportion (95+%) of elk are typically counted in this herd unit and are located on feedgrounds during the winter. This is an extremely “leaky” herd unit and as a result, a population model has not been successfully developed. The amount of elk movement from this herd unit makes simple hand calculations difficult, typically resulting in bull and calf ratios (modeled verses observed), which do not track well from one year to the next. In addition, annual trend counts can vary abruptly for unknown causes.

Weather

Elk in this herd unit experience the coldest winter temperatures compared to all others herd units in western Wyoming, which may result in higher feedground dependence, even on low snow years. Heavy snow loads typically make most native forage unavailable on most winters.

Habitat

Since over 90% of the elk rely on supplemental feeding (feedgrounds) within this herd unit, winter and other seasonal habitats are not considered to be limiting herd dynamics.

Field Data

During 2012 postseason trend counts, 787 elk were observed on Department-operated elk feedgrounds and native winter ranges, showing a continuing decline since 2008 (Table 1). Very few elk (n=72) were counted away from established feedgrounds in Areas 86 and 87, which is typical for this herd unit due to climatic conditions. Snow conditions were well below normal this past winter (2012-13). Over 90% of the documented elk numbers were from feedground locations.

Table 1. Herd trend counts in the Hoback Herd Unit, 2003-2012.

Location	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Dell Creek F.G.	230	298	258	297	311	345	298	228	205	171
McNeel F.G.	680	560	716	598	591	687	701	596	613	544
N.W.R.	<u>136</u>	<u>83</u>	<u>70</u>	<u>67</u>	<u>38</u>	<u>23</u>	<u>44</u>	<u>13</u>	<u>4</u>	<u>72</u>
Herd Unit Total	1046	941	1044	962	940	1055	1043	837	822	787

The 2012 postseason ratios of 17 bulls:100 cows:31 calves, shows a decrease in the bull ratio and an increase in the calf ratio compared to 2011 bull:cow:calf ratios of 20:100:24. The 2012 bull ratio is adequate and within management goals for this herd unit, while the calf ratio is the same as the 5-year average of 31:100.

Harvest Data

The continuation of general license, “any” elk hunting seasons in Area 86, and limited number of days of general, “any” elk hunting in Area 87 have proven successful at maintaining the winter population near the objective in the past. Additional antlerless harvest opportunities were made

available starting in 2008 and continuing through 2011 in Area 86 and the southern portions of Area 87 to help reduce elk numbers in surrounding herd units, as many elk from those herd units move into these areas during the spring/summer/fall period. The 2012 harvest survey indicated a total harvest of approximately 240 (150 bulls and 90 cows/calves) which increased from the 190 (112 bulls and 78 cows/calves) reported in 2011. The 2011 harvest was the second lowest (2005 was lowest) reported harvest during the past 10-years. Hunter success was 32% with 22 days/animal harvested in 2012, an improvement from 24% success and 26 days/animal harvested in 2011. The past 5-year averages report a total harvest of 259 elk, hunter success of 30%, and 23 days/animal harvested.

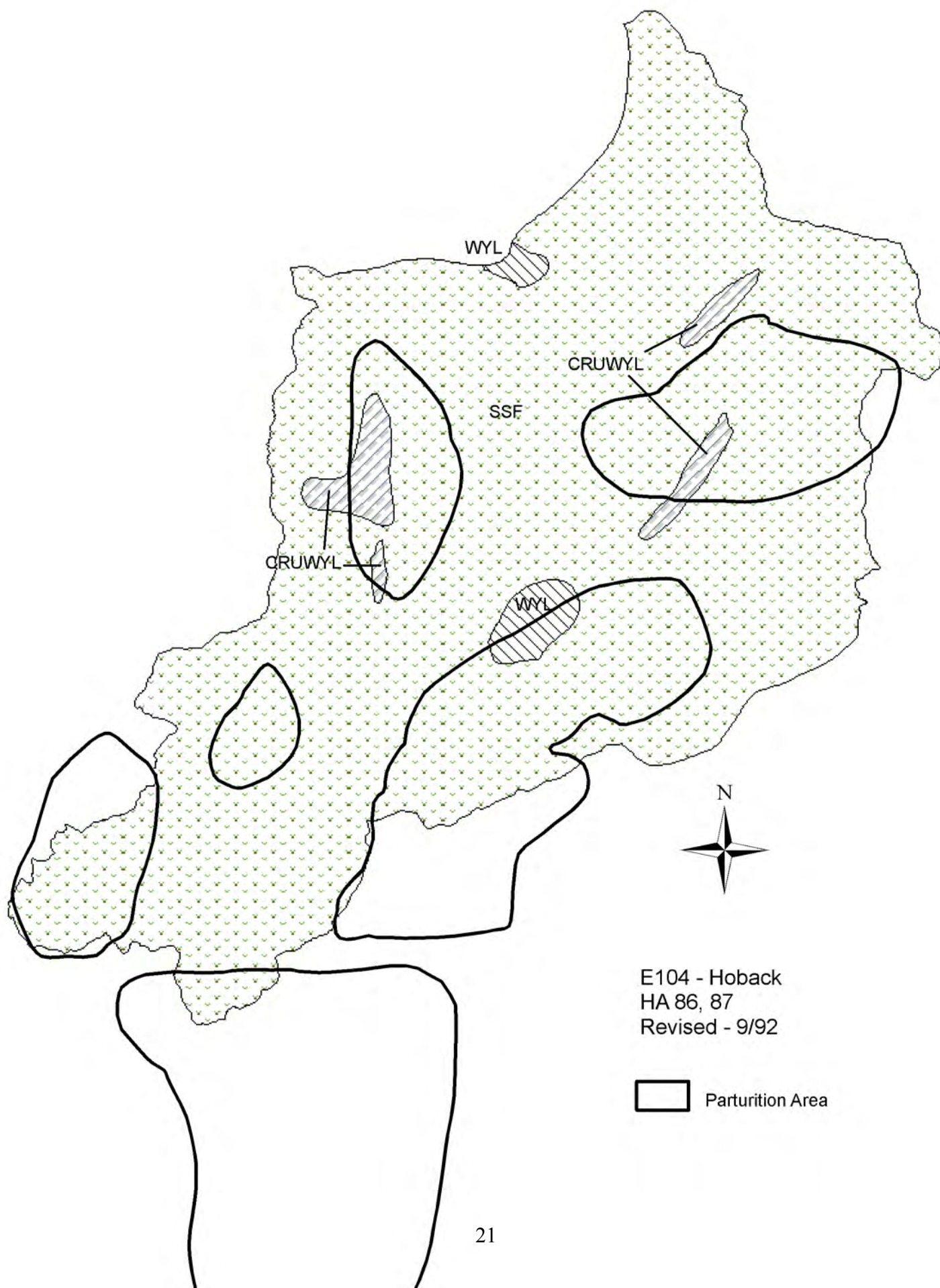
Population

Starting in 2012, a mid-winter trend count was used to manage this herd unit instead of hand-derived population model estimates. This is an extremely “leaky” herd unit and as a result, a functional computer simulation model has never been developed. The post hunt population trend objective for this herd is 1,100 elk ($\pm 20\%$). The 2010-2012 mid-winter 3-year trend count average is 815 elk, which is below this herd objective.

Management Summary

The Hoback Herd Unit is “leaky” in regards to elk moving in and out of the herd on a seasonal basis. Therefore population estimates remain very difficult and computer simulations are unreliable. Fluctuations of 100+ animals between annual winter counts are common without any rational explanation for the changes. Based on harvest data from elk ear tagged at Franz feedground, located in the Piney herd unit, approximately half these elk move into the south portion of Area 87 and Area 86 (Hoback herd unit) during the summer and fall. Ear tag data from the Dell Creek feedground indicate about half those elk move out of the Hoback herd unit during the summer and fall. Since 2008, hunting seasons have been designed to increase harvest on antlerless within the Hoback herd unit as well as surrounding herd units, which can be attributed to low elk numbers during the past three winters. In 2012 seasons were changed to reduce female harvest in response to low elk numbers during the winter of 2011-2012. Currently, adequate bull:cow:calf ratios are being maintained, although a declining trend. The recent mid-winter 3-year trend average was 815 elk, 26% below the objective of 1,100. Herd management for 2013 will be similar to 2012, to reduce antlerless harvest in parts of this herd, primarily targeted in the northern portion of Area 87, in an effort to increase the postseason (winter) population.

The 2013 hunting seasons for this herd unit will be the same as in 2012. In Area 87, the general license season is “any” elk hunting the entire season (Oct. 15 – Oct. 31) south of U.S. Hwy 191, but will be limited to “antlered” elk north of U.S. Hwy 191. A total of 25 limited quota Type 6 (cow/calf) licenses are available in a portion of Area 87, valid from Nov. 19 through January 31, in an effort to reduce damage to privately stored hay crops. The 2013 season in Area 86 offers a general license, “any” elk hunting from September 26 through October 31, same as in past years. The 2013 hunting seasons are projected to harvest approximately 215 elk (130 bulls, 70 cows, and 15 calves) with a projected 2013 mid-winter population trend count around 750 elk.



E104 - Hoback
HA 86, 87
Revised - 9/92

 Parturition Area

2012 - JCR Evaluation Form

SPECIES: Elk

PERIOD: 6/1/2012 - 5/31/2013

HERD: EL106 - PINEY

HUNT AREAS: 92, 94

PREPARED BY: GARY FRALICK

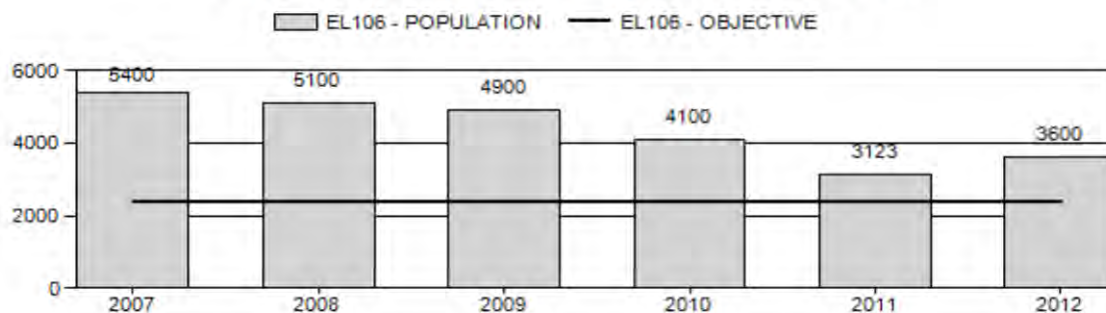
	2007 - 2011 Average	2012	2013 Proposed
Population:	4,525	3,600	2,600
Harvest:	922	1,103	1,300
Hunters:	2,948	3,214	3,100
Hunter Success:	31%	34%	42%
Active Licenses:	3,083	3,380	3,100
Active License Percent:	30%	33%	42%
Recreation Days:	23,577	27,180	27,000
Days Per Animal:	25.6	24.5	20.8
Males per 100 Females	29	33	
Juveniles per 100 Females	33	37	

Population Objective:	2,400
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	50%
Number of years population has been + or - objective in recent trend:	9
Model Date:	2/27/2013

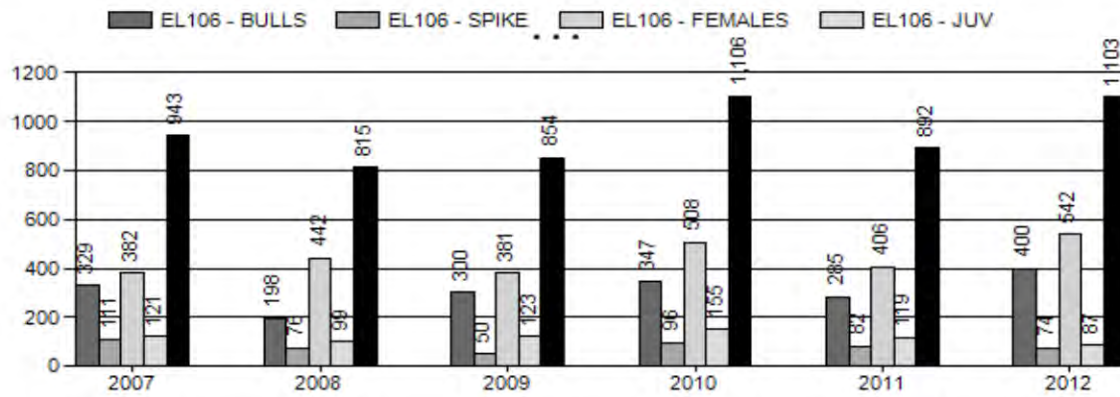
Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	24%	33%
Males ≥ 1 year old:	60%	54%
Juveniles (< 1 year old):	13%	17%
Total:	26%	36%
Proposed change in post-season population:	-25%	-28%

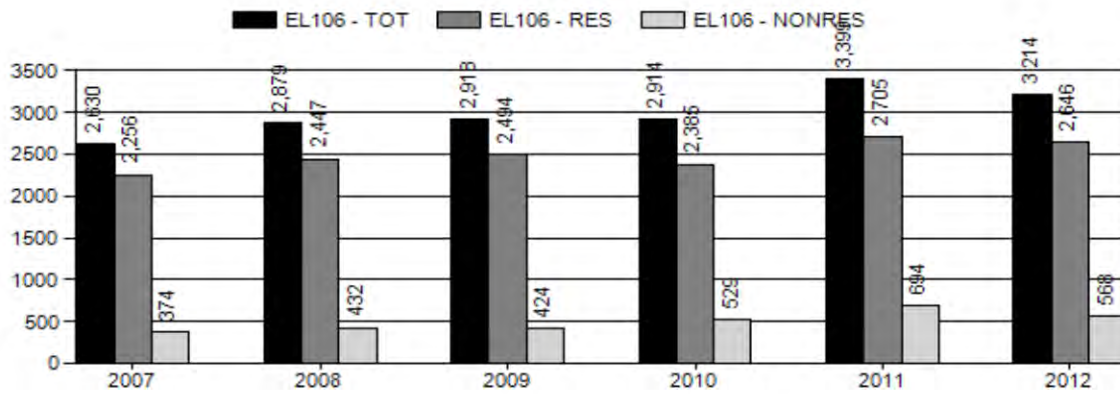
Population Size - Postseason



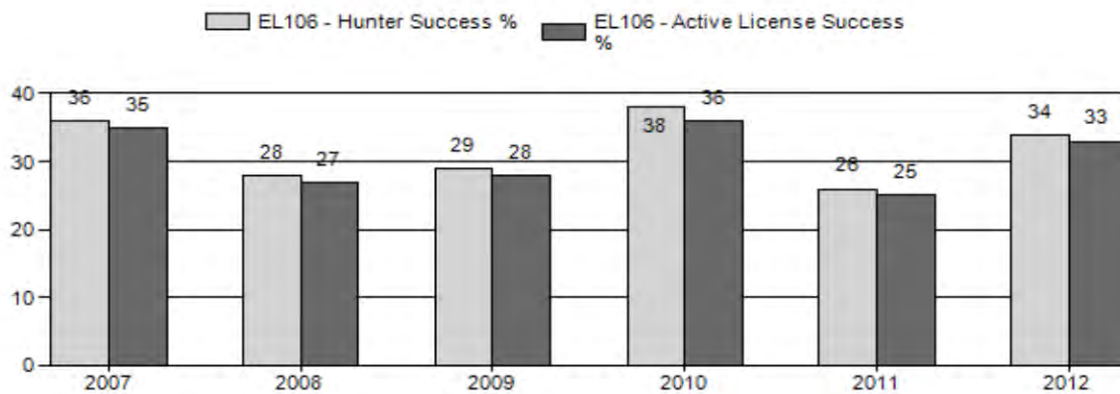
Harvest



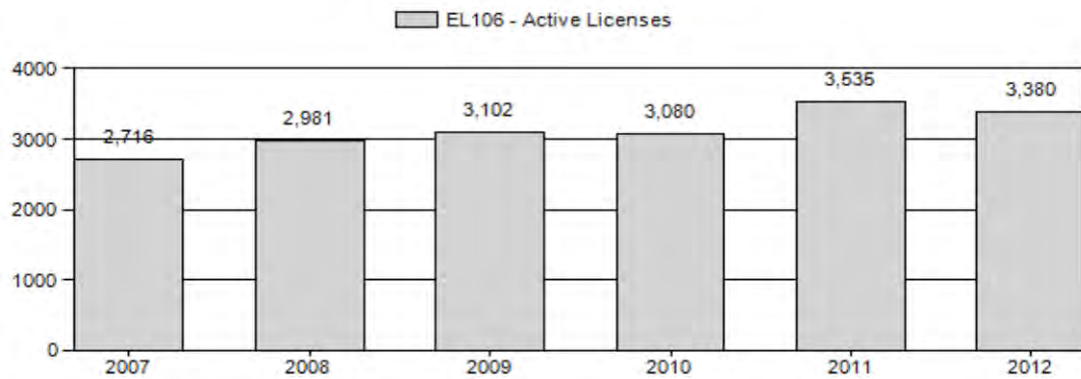
Number of Hunters



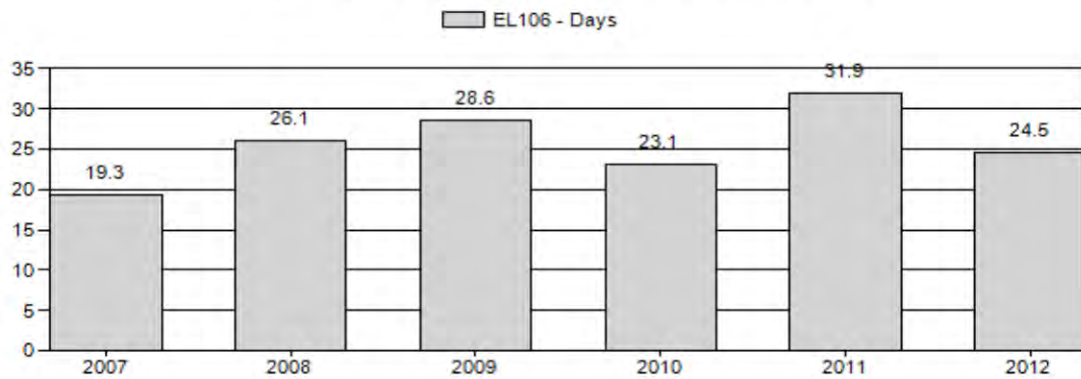
Harvest Success



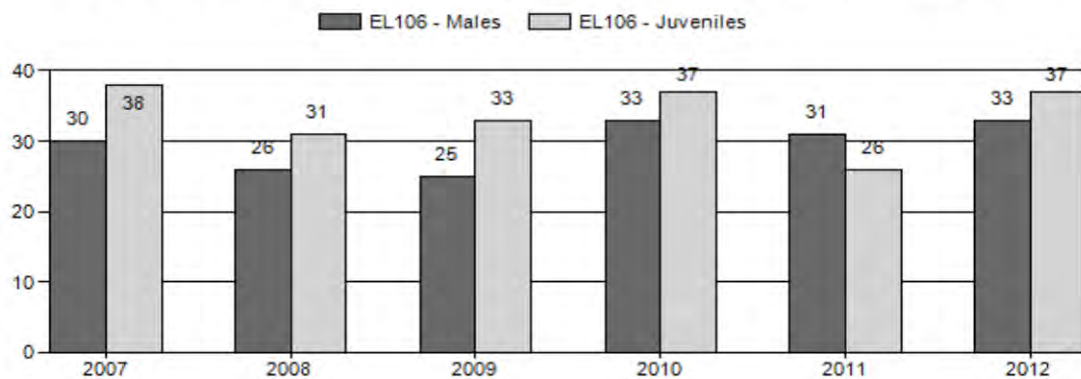
Active Licenses



Days per Animal Harvested



Postseason Animals per 100 Females



2007 - 2012 Postseason Classification Summary

for Elk Herd EL106 - PINEY

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot Cls	Cls Obj	Males to 100 Females				Young to		
		Ylg	Adult	Total	%	Total	%	Total	%			Ylng	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2007	5,400	241	301	542	18%	1,791	60%	672	22%	3,005	736	13	17	30	± 1	38	± 1	29
2008	5,100	255	243	498	17%	1,887	64%	585	20%	2,970	383	14	13	26	± 1	31	± 1	25
2009	4,900	190	216	406	16%	1,618	63%	539	21%	2,563	403	12	13	25	± 1	33	± 1	27
2010	4,100	199	357	556	19%	1,683	59%	621	22%	2,860	381	12	21	33	± 1	37	± 1	28
2011	3,123	217	302	519	20%	1,660	64%	425	16%	2,604	369	13	18	31	± 1	26	± 1	20
2012	3,600	261	306	567	19%	1,705	59%	639	22%	2,911	357	15	18	33	± 1	37	± 1	28

2013 HUNTING SEASONS

SPECIES: ELK

HERD UNIT: PINEY (EL106)

<u>HUNT AREA</u>	<u>TYPE</u>	<u>OPENS</u>	<u>CLOSES</u>	<u>QUOTA</u>	<u>LIMITATIONS</u>
92		Oct.1	Oct. 14		General license; antlerless elk
		Oct.1	Oct.31		General license; any elk
		Nov.1	Nov. 24		General license; antlerless elk
	6	Oct.1	Nov. 24	500	Limited quota; cow or calf
		Nov. 25	Jan. 31		Unused Area 92 Type 6 licenses valid off national forest in portion of Area 92 east of Sublette County Roads 115, 116, and 117 and south of the North Beaver Road
94		Oct. 1	Oct. 14		General license; antlerless elk
		Oct. 15	Oct. 31		General license; any elk

	Nov. 1	Nov. 24		General license; antlerless elk valid north of Middle Piney Creek
6	Oct. 1	Oct. 31	550	Limited quota; cow or calf
	Nov. 1	Nov. 24		Unused Area 94 Type 6 valid north of Middle Piney Creek
	Nov. 25	Jan. 31		Unused Area 94 Type 6 licenses, 100 Access Permits will be issued for antlerless elk only on those lands enrolled in the Big Piney Hunter Management Area in Area 94. Access permits will be available beginning November 1.
92,94	Sept. 1	Sept. 30		General license; Archery only, Refer to Section 4.

SUMMARY OF CHANGES BY LICENSE TYPE

Area	License Type	Change from 2012
92	Gen.Antlerless	Change closing dates from Nov. 20 to Nov. 24
92	Limited Type 6	Changes closing dates from Nov. 20 to Nov. 24
94	Gen. Antlerless	Change closing date to Oct. 31 hunt area wide
94	Gen. Antlerless	Change open area from entire hunt area to that portion of area north of Middle Piney Creek, Nov. 1-24
94	Limited Type 6	Change closing date to Oct. 31 hunt area wide
94	Limited Type 6	Change open area from entire hunt area to that portion of area north of Middle Piney Creek, Nov. 1-24
Total	Limited Quota	No Change

Management Evaluation

Current Management Objective: 2,400

Management Strategy: Recreational

2012 Postseason Population Estimate: ~3,600

2013 Proposed Postseason Population Estimate: ~2,600

The population objective for Piney elk herd is 2400 elk. The management strategy is recreational and the objective and management strategy were last revised in 2011. The current population estimate is 3600 elk.

HERD UNIT ISSUES

The management strategy for the Piney elk herd since 2005 has been population reduction. Population performance has exhibited a somewhat stable trend over the last five years, however, at a level that greatly exceeds the population objective. Despite some of the most liberal elk hunting seasons in western Wyoming, sustained population reduction has been unattainable. Hot and dry weather patterns, a reduction in hunter participation during the November seasons, and high bull:cow ratios that typically exceed 30 bulls:100 cows have contributed to poor antlerless harvest (Appendix A). High bull numbers provide hunters an opportunity to harvest an antlered elk rather than a cow or calf. High calf production and survival since 2005, and resulting cow:calf ratios that in some years exceed 40 calves: 100 cows may have reduced the effect of above average antlerless elk harvest.

WEATHER

Weather conditions during 2012 were extremely dry during the late summer and through the hunting season. Drought conditions persisted into early winter; snowpack in the Wyoming Range was reported below normal. The drought conditions of 2012 were widespread and severe. Precipitation data from the NOAA weather station near Big Piney documented the driest April through June since 1895, when monitoring started at this site. Please refer to the following web sites for specific weather station data: <http://www.ncdc.noaa.gov/temp-and-precip/time-series> and <http://www.ncdc.noaa.gov/oa/climate/research/prelim/drought/pdiimage.html>.

HABITAT

Since the late 1990s, winter range browse has been measured each spring and fall to assess production and utilization. The growing conditions were extremely poor in 2012 due to lack of precipitation in the spring and preceding winter. Many shrubs were unable to produce leaders, and leaves were even stunted in many cases. Ephemeral leaf drop occurred in August on many plants, just one of many responses to the extreme dry conditions. Seed production was very minimal for all species due to lack of moisture.

For additional site specific information, please refer to the 2012 Annual Report Strategic Habitat Plan Accomplishments, pages 104-123 for Pinedale Region habitat improvement project summaries (<http://wgfd.wyo.gov/web2011/wildlife-1000708.aspx>).

FIELD DATA

Since 2005, population reduction has been unattainable. Management strategies have emphasized the harvest of antlerless elk with November hunting seasons and issuance of limited quota cow/calf licenses. Since 2005, total antlerless harvest has not resulted in a declining population. While both hunt areas continue to support winter elk numbers at or above Commission-established feedground quotas, it is Area 94, and specifically the Bench Corral feedground that has supported the highest increase in elk (Appendix A). Consequently, hunting opportunities, especially for antlerless elk in Area 94 where trend counts continue to increase, will continue to be liberal in order to affect the desired population reduction. Limited quota Type 6 cow/calf licenses will focus on the antlerless segment of the population since these license holders typically account for at least 50% of the antlerless harvest in the herd unit.

HARVEST

Hunter success was estimated at 34% in 2012 with a total harvest over 1100 elk. General license hunters accounted for 72% of the total elk harvest, and 59% of the total antlerless harvest. Participation from limited quota Type 6 license holders is necessary in the harvest of antlerless elk, especially during the November portion of the hunt. The added dimension of harvesting antlerless elk with Type 6 licenses other than general hunting opportunity will assist in population reduction. Antlerless hunting is an essential component of the elk management strategy. Limited quota licenses holders will have ample hunting opportunity from October through November. The management goal of maintaining the postseason bull: cow ratios of at least 20 bulls:100 cows is currently being met.

POPULATION

The model evaluation is considered excellent based on the criteria associated with years of data, availability of ratio data, juvenile and adult survival estimates, model alignment, and the current model is biologically defensible. The only criterion that was not achieved was the absence of at least two sample-based population estimates. The population has been trending downward since 2007. This trend is reflected in the spreadsheet model estimates. The “Time Sensitive Juvenile – Constant Adult Mortality Rate” (TSJCA) spreadsheet model was chosen for the post season population estimate. This model provides the best alignment of bull:cow ratios, an AICc value of 328, bull harvest percentages, and annual population dynamics.

MANAGEMENT SUMMARY

The 2013 hunting seasons are designed to reduce the Piney elk toward the objective of 2400 elk. The emphasis to harvest adult female elk in both hunt areas will continue for the 6th consecutive year by opening the general and limited quota antlerless elk hunting on October 1. In addition, the number of days for the November portion of the antlerless elk hunting season will increase from 20 days to 24 days for both license types. The number of limited quota Type 6 licenses available in 2013 will remain at 950. A total of 500 and 550 Type 6 licenses will be issued in Areas 92 and 94, respectively.

A substantial change in the 2013 hunt for Area 94 will be to shift the hunting pressure north of Middle Piney Creek during November. This will focus harvest on that segment of the population that spends the winter on the Bench Corral feedground. The limited quota Type 6 cow/calf license will run from November 1 – November 24 north of Middle Piney Creek. For the 2nd consecutive year, hunters will be permitted to harvest up to three elk in this herd.

The 2013 hunting seasons are projected to harvest 1300 elk. The projected 2013 posthunt population estimate should be approximately 2600 elk.

INPUT	
Species:	Elk
Biologist:	Gary Fralick
Herd Unit & No.:	Piney Elk
Model date:	02/27/13

MODELS SUMMARY				Notes	
		Fit	Relative AICc	Check best model to create report	
CJ,CA	Constant Juvenile & Adult Survival	276	285	<input type="checkbox"/> CJ,CA Model	
SC,J,SCA	Semi-Constant Juvenile & Semi-Constant Adult Survival	43567	43576	<input type="checkbox"/> SC,J,SCA Iv	
TS,J,CA	Time-Specific Juvenile & Constant Adult Survival	210	328	<input checked="" type="checkbox"/> TS,J,CA Model	
TS,J,CA,MSC	Time-Specific Juv, Constant Adult Survival, Male survival coefficient	300016	300027	<input type="checkbox"/> TS,J,CA,MSC Mode	

Population Estimates from Top Model									
Year	Posthunt Population Est.		Predicted Prehunt Population		Predicted Posthunt Population		Total		Objective
	Field Est	Field SE	Juveniles	Total Males	Females	Juveniles	Total Males	Females	
1993			1222	1264	3151	1178	884	2923	4985
1994			1641	1405	3354	1533	711	2906	5149
1995			1398	1407	3506	1327	1065	3301	5694
1996			1447	1549	3687	1379	1204	3275	5858
1997			1088	1806	3786	965	1319	3247	5531
1998			1291	1719	3563	1205	1239	3077	5520
1999			1485	1757	3514	1366	1140	3107	5612
2000			1239	1636	3517	1083	1085	2848	5016
2001			1127	1552	3237	1053	1087	2925	5066
2002			1089	1461	3218	1008	1131	2997	5136
2003			1074	1485	3268	996	1096	3020	5112
2004			1312	1511	3350	1200	1035	2954	5189
2005			1361	1470	3304	1327	1120	3124	5571
2006			1435	1601	3518	1324	1135	3160	5619
2007			1308	1615	3551	1175	1131	3131	5436
2008			1032	1551	3463	923	1249	2977	5149
2009			1067	1564	3215	931	1179	2796	4906
2010			1114	1569	3115	943	1082	2557	4582
2011			744	1483	2892	625	1080	2441	4146
2012			860	1329	2631	763	799	2037	3600
2013			613	1127	2310	503	599	1518	2620
2014									
2015									
2016									
2017									
2018									
2019									
2020									
2021									
2022									
2023									
2024									
2025									

Survival and Initial Population Estimates

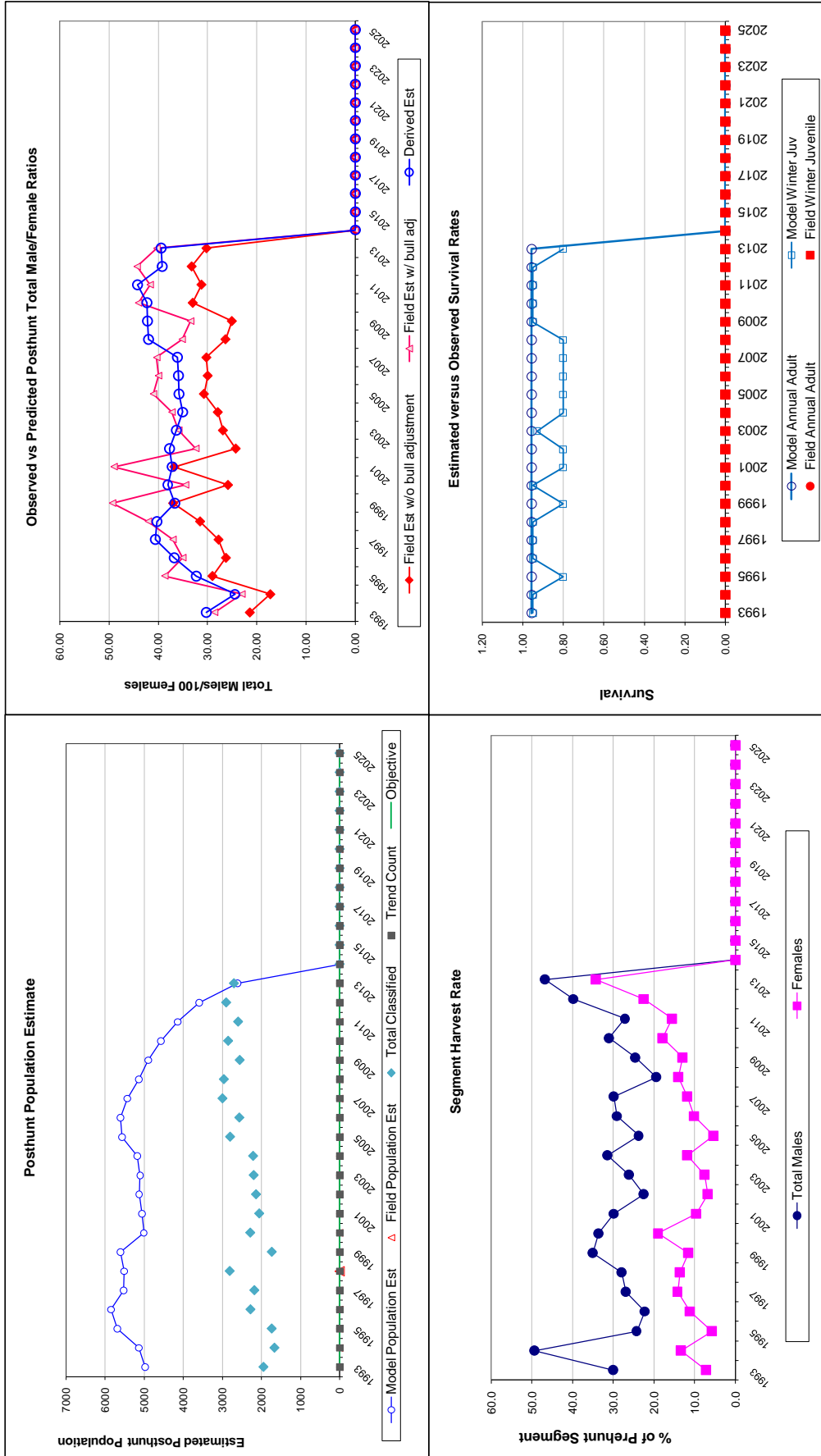
Year	Annual Juvenile Survival Rates		Annual Adult Survival Rates	
	Model Est	Field Est	Model Est	Field Est
1993	0.95		0.96	
1994	0.95		0.96	
1995	0.80		0.96	
1996	0.95		0.96	
1997	0.95		0.96	
1998	0.95		0.96	
1999	0.80		0.96	
2000	0.95		0.96	
2001	0.80		0.96	
2002	0.80		0.96	
2003	0.93		0.96	
2004	0.80		0.96	
2005	0.80		0.96	
2006	0.80		0.96	
2007	0.80		0.96	
2008	0.80		0.96	
2009	0.95		0.96	
2010	0.95		0.96	
2011	0.95		0.96	
2012	0.95		0.96	
2013	0.80		0.96	
2014				
2015				
2016				
2017				
2018				
2019				
2020				
2021				
2022				
2023				
2024				
2025				

Parameters:		Optim cells
Adult Survival =		0.956
Initial Total Male Pop/10,000 =		0.088
Initial Female Pop/10,000 =		0.292

MODEL ASSUMPTIONS	
Sex Ratio (% Males) =	50%
Wounding Loss (total males) =	10%
Wounding Loss (females) =	10%
Wounding Loss (juveniles) =	10%
Total Bulls Adjustment Factor	75%

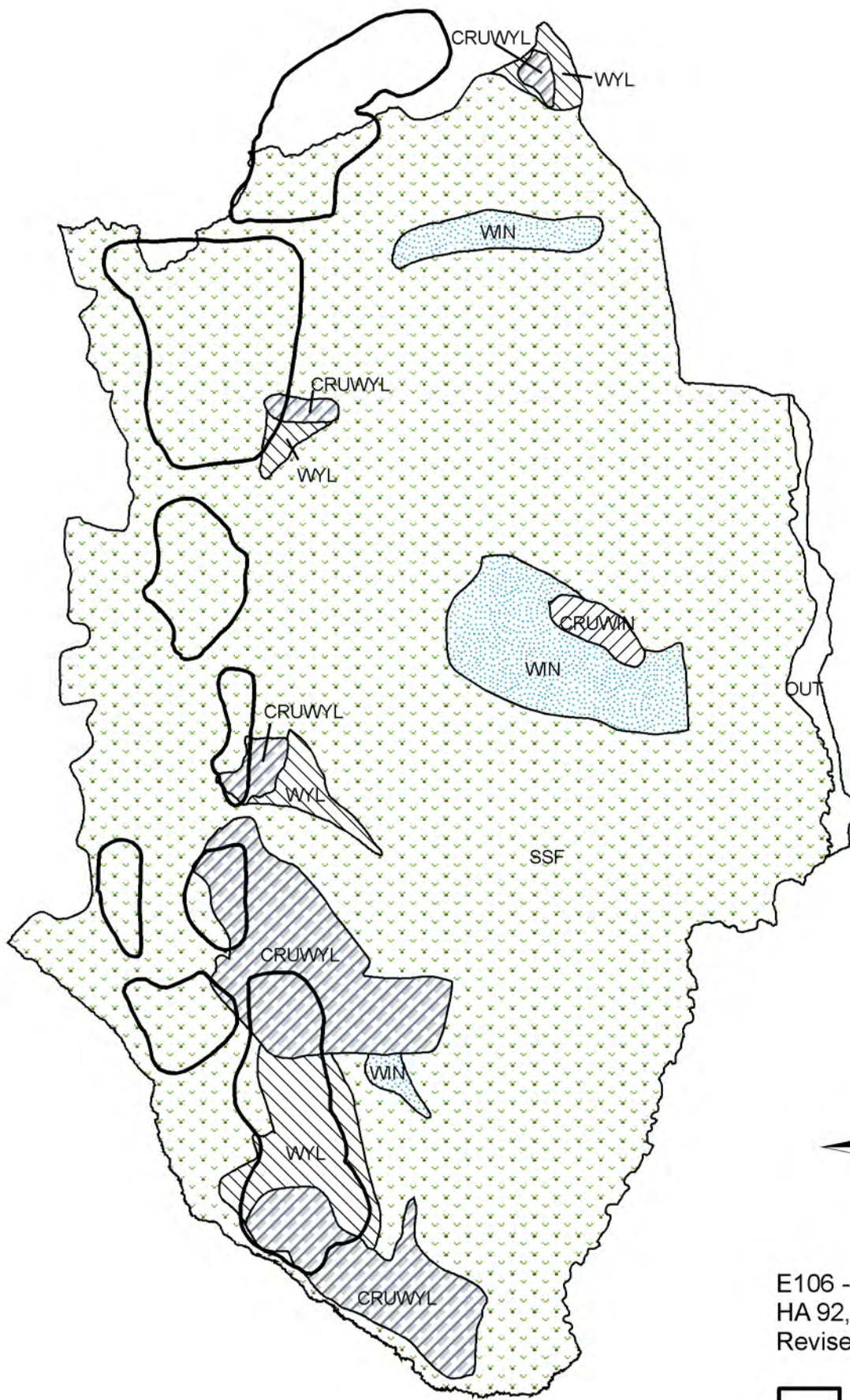
Year	Classification Counts										Harvest					Segment Harvest Rate (% of Prehunt Segment)	
	Juvenile/Female Ratio			Total Male/Female Ratio				Harvest									
	Derived Est	Field Est	Field SE	Derived Est	Field Est w/ bull adj	Field Est w/o bull adj	Field SE	Juv	Yr1 males	2+ Males	Females	Total Harvest	Total Males	Females			
1993		40.31	2.16	30.24	28.59	21.44	1.47	40	116	230	207	593	30.1	7.2			
1994		52.74	2.86	24.46	23.04	17.28	1.43	99	144	487	408	1138	49.4	13.4			
1995		40.19	2.34	32.27	38.71	29.03	1.91	65	120	191	186	562	24.3	5.8			
1996		42.12	2.10	36.76	35.05	26.29	1.56	62	74	240	375	751	22.3	11.2			
1997		29.73	1.67	40.62	37.05	27.79	1.60	111	156	287	490	1044	27.0	14.2			
1998		39.16	1.82	40.26	42.05	31.54	1.58	78	109	328	442	957	28.0	13.6			
1999		43.97	2.57	36.68	49.34	37.01	2.30	108	138	423	370	1039	35.1	11.6			
2000		38.03	1.94	38.09	34.50	25.88	1.53	142	106	395	608	1251	33.7	19.0			
2001		36.01	2.03	37.18	49.02	36.77	2.05	67	117	305	284	773	29.9	9.7			
2002		33.65	1.82	37.74	32.40	24.30	1.49	73	53	247	201	574	22.6	6.9			
2003		32.99	1.78	36.31	35.87	26.90	1.57	71	84	269	226	650	26.2	7.6			
2004		40.62	2.08	35.04	37.26	27.94	1.65	102	77	356	360	895	31.5	11.8			
2005		42.48	1.93	35.85	41.02	30.76	1.57	31	76	242	164	513	23.8	5.5			
2006		41.88	1.99	35.92	39.99	29.99	1.61	101	91	333	325	850	29.1	10.2			
2007		37.52	1.70	36.12	40.35	30.26	1.48	121	111	329	382	943	30.0	11.8			
2008		31.00	1.47	41.97	35.19	26.39	1.33	99	76	198	442	815	19.4	14.0			
2009		33.31	1.66	42.16	33.46	25.09	1.39	123	50	300	381	854	24.6	13.0			
2010		36.90	1.73	42.32	44.05	33.04	1.62	155	96	347	508	1106	31.1	17.9			
2011		25.60	1.39	44.23	41.69	31.27	1.57	108	84	282	410	884	27.2	15.6			
2012		37.48	1.74	39.23	44.34	33.26	1.61	88	75	407	540	1110	39.9	22.6			
2013		33.13	1.63	39.44	40.32	30.24	1.54	100	82	398	720	1300	46.9	34.3			
2014																	
2015																	
2016																	
2017																	
2018																	
2019																	
2020																	
2021																	
2022																	
2023																	
2024																	
2025																	

FIGURES



Comments:

Appendix A. Piney Elk Herd, posthunt herd composition data, 2007-2012.										
2007	Adult Males	Yrlng Males	Total Males	Cows	Calves	Total	Ratio:100 Females			
	Adult Males	Yrlng Males	Total Males				Adult Males	Yrlng Males	Total Males	Calves
92 JFG	87	67	154	583	199	936				
92 FFG	97	41	138	330	127	595				
92 NR	8	3	11	3	1	15				
94 FFG	19	28	47	276	103	426				
94 NPFG	12	39	51	274	119	444				
94 BCFG	76	63	139	323	123	585				
94 NR	2	0	2	2	0 (465)	469				
TOTAL	301	241	542	1791	672(465)	3470	17	13	30	37
2008										
92 JFG	93	89	182	581	194	957				
92 FFG	131	61	192	362	166	720				
92 NR	8	0	8	0	0	8				
94 FFG	3	28	31	216	64	311				
94 NPFG	0	0	0	0	0	0				
94 BCFG	7	77	84	728	161	973				
94 NR	1	0	1	0	0(400)	401				
TOTAL	243	255	498	1887	585(400)	3370	13	13	26	31
2009										
92 JFG	74	71	145	576	229	950				
92 FFG	90	57	147	297	119	563				
92 NR	10	1	11	6	1	18				
94 FFG	25	23	48	204	77	329				
94 NPFG	0	0	0	0	0	0				
94 BCFG	5	35	40	505	98(171)	814				
94 NR	12	3	15	30	15	60				
TOTAL	216	190	406	1618	539(171)	2734	13	12	25	33
2010										
92 JFG	97	64	161	479	230	870				
92 FFG	95	36	131	242	93	466				
92 NR	19	4	23	6	7(11)	47				
94 FFG	31	10	41	157	42	240				
94 NPFG	0	0	0	0	0	0				
94 BCFG	52	82	134	786	245	1165				
94 NR	63	3	66	13	4(139)	222				
TOTAL	357	199	556	1683	621(150)	3010	21	12	33	37
2011										
92 JFG	64	69	133	443	170	746				
92 FFG	113	25	138	197	63	398				
92 NR	29	2	31	1	1	33				
94 FFG	6	8	14	138	51	203				
94 NPFG	0	0	0	0	0	0				
94 BCFG	78	110	188	881	140(100)	1309				
94 NR	12	3	15	N/A	N/A(203)	218				
TOTAL	302	217	519	1660	425(303)	2907	18	13	31	26
2012										
92 JFG	14	61	75	391	228	694				
92 FFG	885	41	126	218	79	423				
92 NR	71	2	73	0	0	73				
94 FFG	30	25	55	137	47	239				
94 NPFG	0	0	0	0	0	0				
94 BCFG	65	121	186	959	284	1429				
94 NR	41	11	52	0	1(14)	67				
TOTAL	306	261	567	1705	639(14)	2925	18	15	33	37



E106 - Piney
HA 92, 94
Revised - 12/88

 Parturition Area

2012 - JCR Evaluation Form

SPECIES: Elk

PERIOD: 6/1/2012 - 5/31/2013

HERD: EL107 - UPPER GREEN RIVER

HUNT AREAS: 93, 95-96

PREPARED BY: DEAN CLAUSE

	<u>2007 - 2011 Average</u>	<u>2012</u>	<u>2013 Proposed</u>
Trend Count:	2,466	2,706	2,726
Harvest:	405	451	475
Hunters:	1,149	1,159	1,200
Hunter Success:	35%	39%	40%
Active Licenses:	1,201	37%	1,200
Active License Percentage:	34%	37%	40%
Recreation Days:	9,019	8,987	9,000
Days Per Animal:	22.3	19.9	18.9
Males per 100 Females:	29	28	
Juveniles per 100 Females	30	36	

Trend Based Objective ($\pm 20\%$)

2,500 (2000 - 3000)

Management Strategy:

Recreational

Percent population is above (+) or (-) objective:

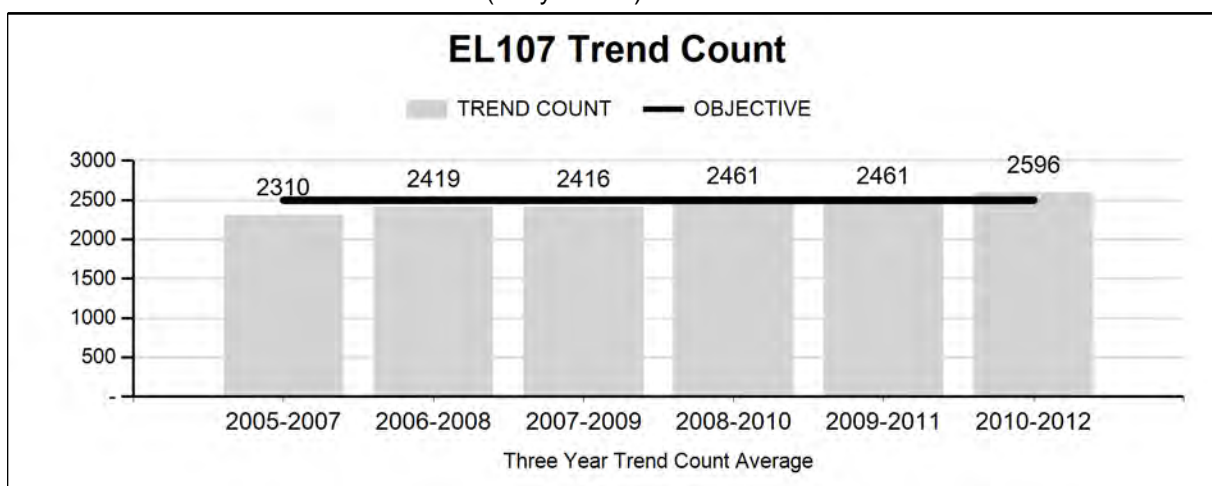
8%

Number of years population has been + or - objective in recent trend:

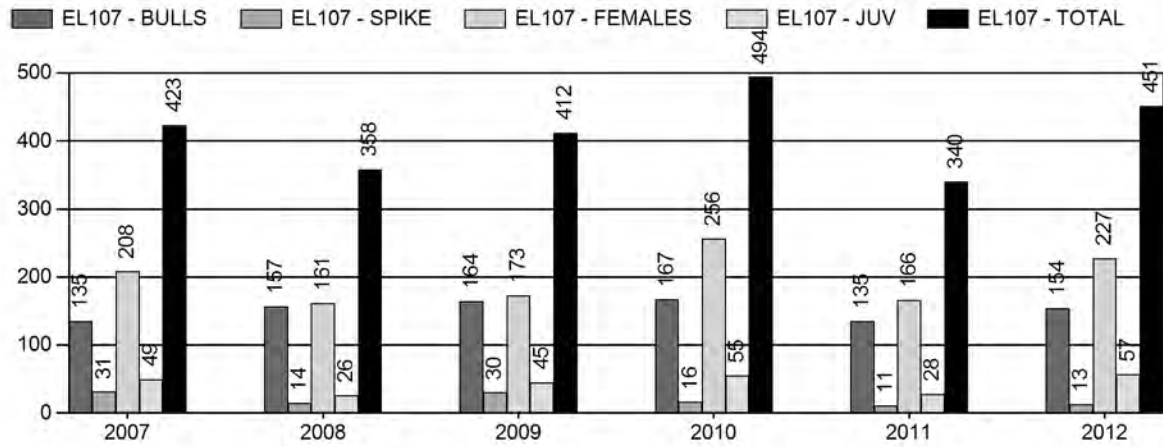
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Proposed harvest rates (percent of pre-season estimate for each sex/age group):

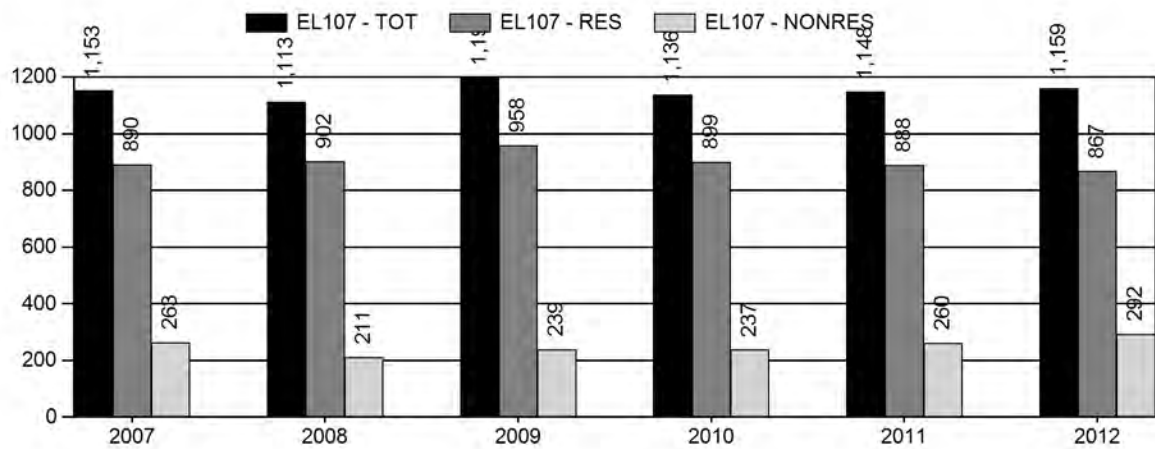
	<u>JCR Year</u>	<u>Proposed</u>
Females ≥ 1 year old:	0%	0%
Males ≥ 1 year old:	0%	0%
Juveniles (< 1 year old):	0%	0%



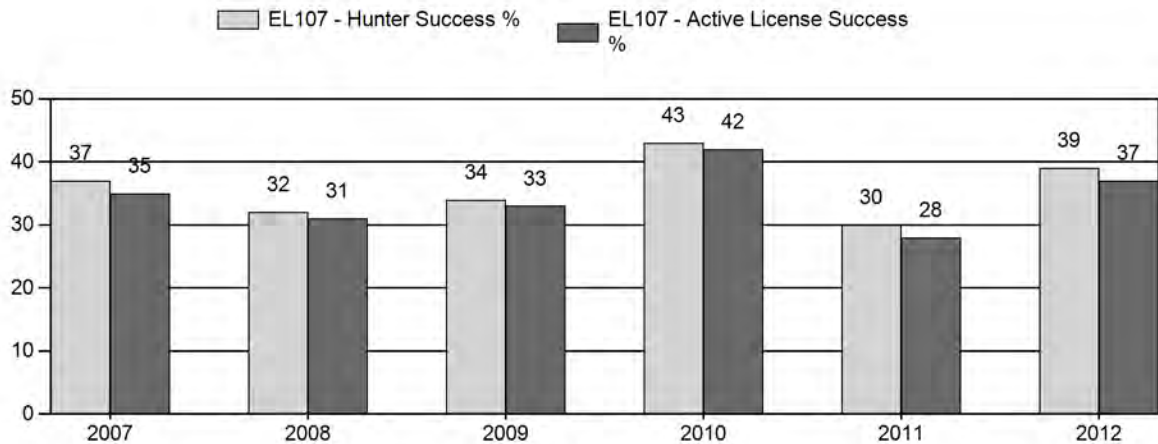
Harvest



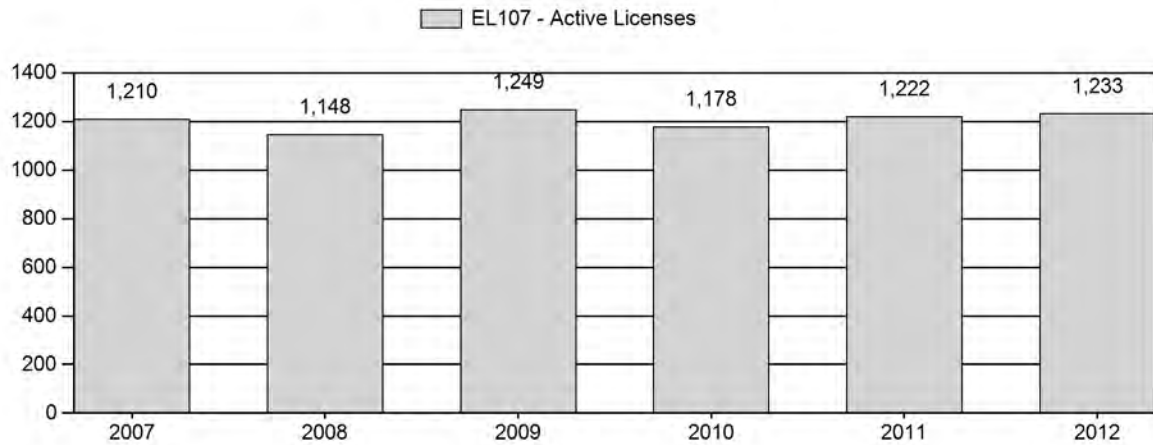
Number of Hunters



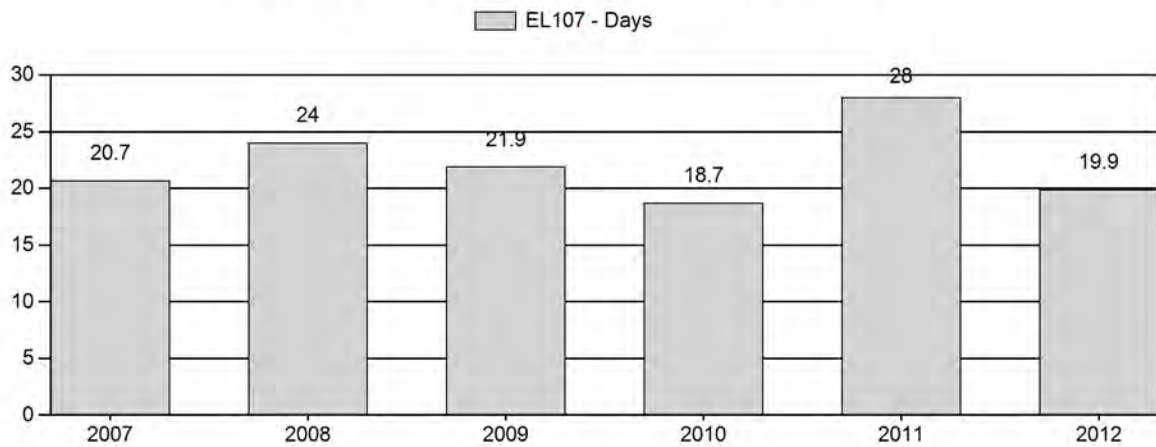
Harvest Success



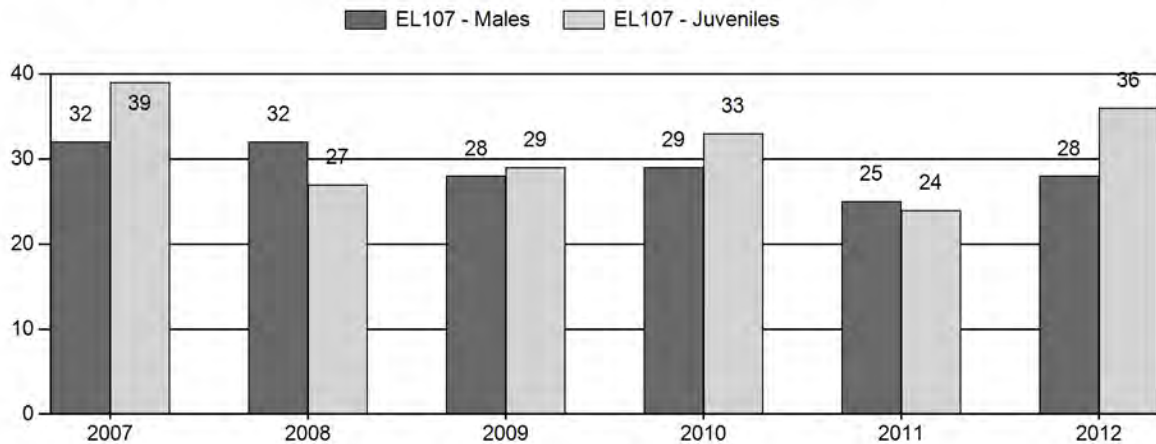
Active Licenses



Days per Animal Harvested



Postseason Animals per 100 Females



2007 - 2012 Postseason Classification Summary

for Elk Herd EL107 - UPPER GREEN RIVER

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot Cls	Cls Obj	Males to 100 Females				Young to		
		Ylg	Adult	Total	%	Total	%	Total	%			Ylg	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2007	2,452	181	241	422	19%	1,326	58%	519	23%	2,267	711	14	18	32	± 0	39	± 0	30
2008	2,688	180	318	498	20%	1,561	63%	422	17%	2,481	380	12	20	32	± 0	27	± 0	20
2009	2,639	134	241	375	18%	1,328	64%	384	18%	2,087	337	10	18	28	± 1	29	± 1	23
2010	2,550	173	273	446	18%	1,547	62%	506	20%	2,499	393	11	18	29	± 0	33	± 0	25
2011	2,621	159	270	429	17%	1,736	67%	417	16%	2,582	274	9	16	25	± 0	24	± 0	19
2012	0	180	278	458	17%	1,649	61%	599	22%	2,706	441	11	17	28	± 0	36	± 0	28

2013 Seasons – Upper Green River Elk Herd Unit (E107)

Hunt Area	Type	Opens	Closes	Quota	Limitations
93	1	Oct. 1	Oct. 31	175	Limited quota; any elk
		Nov. 1	Nov. 20		Unused Area 93 Type 1 licenses; antlerless elk
	4	Oct. 1	Nov. 20	50	Limited quota; antlerless elk,
	6	Oct. 1	Nov. 20	250	Limited quota; cow or calf
95	1	Oct. 15	Nov. 5	200	Limited quota; any elk
	2	Oct. 1	Nov. 5	30	Limited quota; any elk valid only in that portion of the Green River drainage that is upstream from the outlet of Lower Green River Lake including that portion east and south of Mill Creek
	4	Oct. 15	Nov. 5	200	Limited quota; antlerless elk
	5	Oct. 1	Oct. 14	25	Limited quota; antlerless elk valid only in that portion of the Green River drainage that is upstream from the outlet of Lower Green River Lake including that portion east and south of Mill Creek
		Oct. 15	Nov. 5		Unused Area 95 Type 5 licenses valid for entire area, antlerless elk
	6	Oct. 15	Nov. 5	75	Limited quota; cow or calf
96	Gen	Oct. 15	Oct. 31		General license; any elk
	1	Oct. 1	Oct. 31	200	Limited quota; any elk
		Nov. 1	Nov. 20		Unused Area 96 Type 1 licenses; antlerless elk
	4	Oct. 1	Nov. 20	50	Limited quota; antlerless elk
	6	Oct. 1	Nov. 20	200	Limited quota; cow or calf
Archery Seasons					
93, 95, 96		Sept. 1	Sept. 30		Refer to Section 3

Hunt Area	License Type	Quota Changes from 2012
95	1	+25
95	4	-100
95	6	+25
96	6	+50
Herd Unit Total	1	+25
	4	-100
	6	+75

Management Evaluation

Current Mid-Winter Trend Count Management Objective: 2,500

Management Strategy: Recreational

2012 Trend Count: 2706

Most Recent 3-year Running Average Trend Count: 2569

The Green River Herd Unit encompasses approximately 837 square miles of occupied elk habitat, almost entirely within Sublette County. Hunt Area 93 (Waterdog Lakes), Area 95 (Green River), and Area 96 (New Fork) make up the Green River Herd Unit. This herd unit is managed under a mid-winter trend objective of 2,500 ($\pm 20\%$) with a herd estimate derived from 3-year trend count average on feedgrounds and native range combined. This herd is managed under “recreational” management, with a management objective for a bull: 100 cow ratio between 15 to 29.

Herd Unit Issues

Managers believe a very high proportion (90+ %) of elk are typically counted in this herd unit and are located on feedgrounds during the winter. This is an extremely “leaky” herd unit and as a result, a population model has not been successfully developed. The amount of elk movement from this herd unit makes simple hand calculations difficult, typically resulting in bull and calf ratios (modeled verses observed), which do not track well from one year to the next. Large carnivores (wolves and grizzly bears) have reduced hunter participation in the northern portion of this herd unit, and are likely impacting elk productivity/survival. Lack of public access on private lands in Area 93 is limiting harvest and compromising harvest goals.

Weather

Three elk feedgrounds (Green River Lakes, Black Butte, and Soda Lake) are located within this herd unit to winter animals that otherwise would not be able survive the harsh winter conditions. Heavy snow loads typically make most native forage unavailable on most winters.

Habitat

Roughly 43 square miles of native winter range have been identified, which is mainly located in the upper Green River drainage near Pinyon Ridge and Osborn Mountain that winters approximately 200 elk on recent years. Since over 90% of the elk rely on supplemental feeding (feedgrounds) within this herd unit, winter and other seasonal habitats is not considered to be limiting herd dynamics.

Field Data

The 2012 elk trend count was 2,706, showing an increasing trend compared to the previous three years and the highest count in the past 10 years (Table 1). Snow conditions were below normal during 2012, resulting in a few more elk on native winter range than compared to 2010 and 2011. The higher trend count in 2012 is attributed to low harvest rates during the 2011 and 2012 hunting season. Winter conditions, habitat conditions, wolf activity, and timing of classification surveys have resulted in fluctuating trend count data on all three feedgrounds and native winter ranges in past years.

Table 1. Trend Count Information for the Upper Green River Elk Herd Unit, 2003-2012.

Location	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Green River Lakes F.G	504	358	556	545	615	591	0	606	532	572
Black Butte F.G	577	723	882	616	815	1072	959	405	751	847
Soda Lake F.G.	551	313	577	856	714	650	0	1417	1144	1103
N.W.R.	<u>238</u>	<u>525</u>	<u>240</u>	<u>295</u>	<u>220</u>	<u>268</u>	<u>1344</u>	<u>71</u>	<u>155</u>	<u>184</u>
Herd Unit	1870	1919	2255	2312	2364	2581	2303	2499	2582	2706

Composition counts during 2012 revealed a bull:cow:calf ratio of 28:100:36. The 2012 bull ratio was similar and the calf ratio was higher compared to the 5-year average of 29:100:36. The 2012 bull ratio is adequate and within management goals and the calf ratio indicates growth potential for 2013.

Harvest Data

The 2012 harvest report indicated total elk harvest of approximately 450 (280 antlerless and 170 bulls), and increase from the low harvest of 340 elk (194 antlerless and 146 bulls) reported in 2011, but lower than the total harvest of 494 elk (311 antlerless and 183 bulls) in 2010. The 2011 reported harvest is the lowest during the past 10+ years. During 2012, 37% of the hunters were successful in harvesting an elk and averaged 20 days for every animal taken, resulting in better than average success at 34% and 22 days/harvest for the previous 5-year averages. The only hunting seasons changes during 2012, was the addition of 50 cow/calf licenses (Type 6) in Area 95, compared to 2011.

Population

Starting in 2012 a mid-winter trend count will be utilized to manage this herd unit instead a hand-derived population model estimates. This is an extremely “leaky” herd unit and as a result, a functional computer simulation model has never been developed. The mid-winter trend objective for this herd is 2,500 elk ($\pm 20\%$). The 2010-2012 3-year trend average is 2,596 elk, which is within this herd objective.

Management Summary

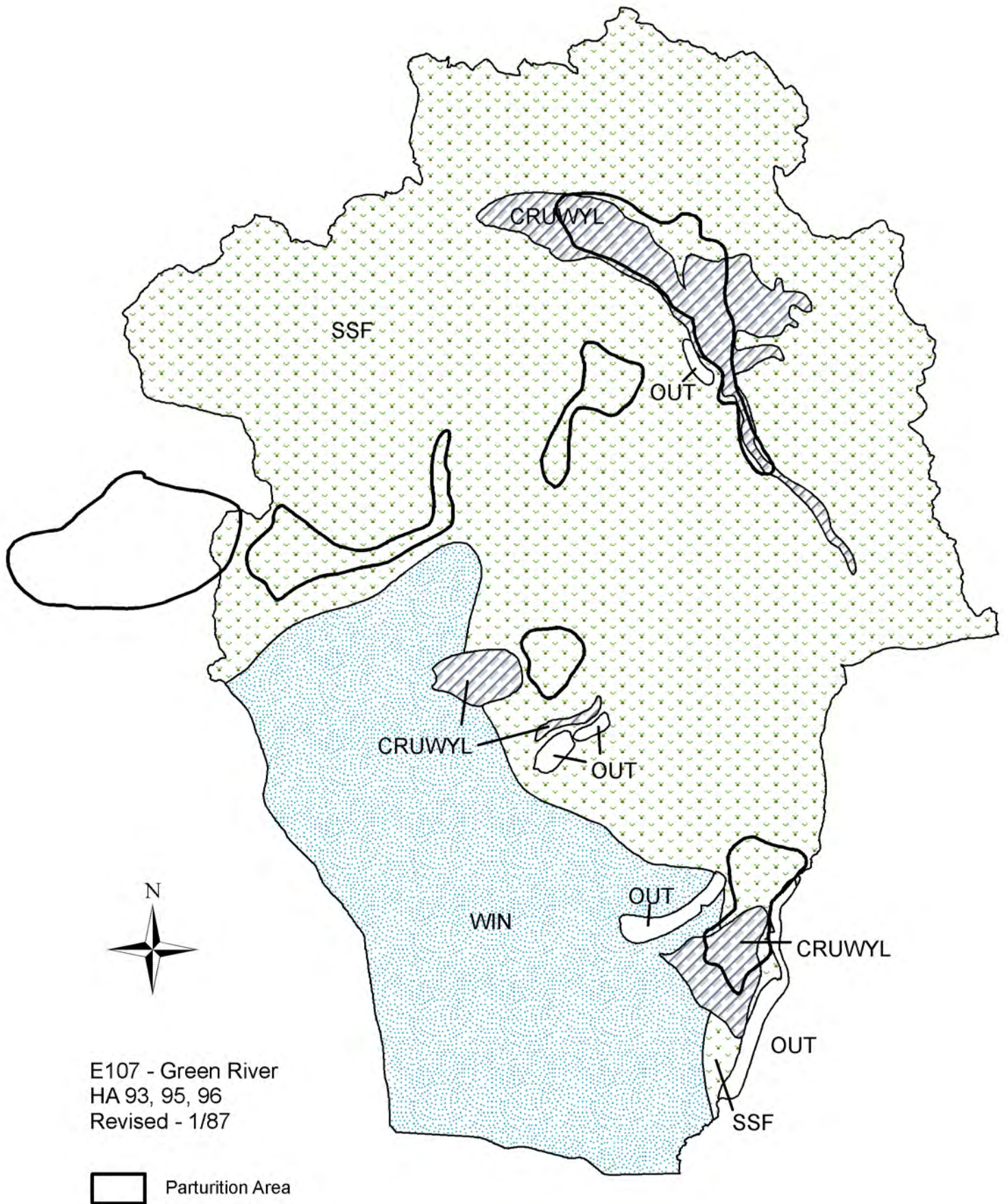
This is an extremely leaky herd unit, and as a result, a functional computer simulation model has not been developed. The recent trend count increases are mainly attributed to very low harvest rates during the 2011 hunting season and lower than predicted harvest in 2012. Overall, the data collected annually in this herd unit has indicated slow population increases since 2003 with the current population within management objectives for this herd unit. Seasons were structured

during 2004 and 2005 to reduce overall harvest in Area 96 to build elk in that area. The 2006 - 2008 seasons were intended to slightly increase antlerless harvest. The 2009 - 2012 seasons were also designed to slightly increase antlerless harvest which has been somewhat successful at achieving that goal. Hunter participation has declined in portions of this herd unit, specifically the northern portions of Areas 93 and 95, although it appears predation from wolves and bears may be compensating for lower hunter/harvest rates in those areas.

The 2013 seasons for the Upper Green River Herd Unit are designed to maintain harvest rates and harvest proportions similar to 2010 -2012. The same October 1 – November 20 season with no changes in limited quotas licenses (175 Type 1 and 300 Type 4 & 6) for Area 93.

In Area 95, the same season length (October 15 – November 5) with a few changes were made in limited quota licenses to align with license demands and slightly increase harvest opportunities. The quotas of 30 (Type 2), and 25 (Type 5) will remain the same. An increase of 25 Type 1 licenses (n=200) and 25 Type 6 licenses (n=75) will be available in 2013. A reduction of 100 (Type 4) licenses (n=200) was made as only half these licensed (150) have sold during the past two years.

The 2013 seasons in Area 96 will remain similar as in 2012, season length of October 1 to November 20 for antlerless elk harvest opportunities for limited quota licenses. In 2013, limited quota licenses will remain at 200 (Type 1), 50 (Type 4), but an increase to 200 (+50) Type 6 licenses. As in the past, general license hunting in Area 96 will remain open from October 15 – October 31 for any elk. A projected harvest of 475 elk (175 bulls, 250 cows, and 50 calves) for 2013 should result in a post season 2012 population of approximately 2,700 elk.



2012 - JCR Evaluation Form

SPECIES: Elk

PERIOD: 6/1/2012 - 5/31/2013

HERD: EL108 - PINEDALE

HUNT AREAS: 97-98

PREPARED BY: DEAN CLAUSE

	<u>2007 - 2011 Average</u>	<u>2012</u>	<u>2013 Proposed</u>
Trend Count:	1,909	2,253	2,104
Harvest:	366	554	565
Hunters:	1,212	1,304	1,450
Hunter Success:	30%	42%	39%
Active Licenses:	1,232	41%	1,450
Active License Percentage:	30%	41%	39%
Recreation Days:	7,306	8,604	9,500
Days Per Animal:	20.0	15.5	16.8
Males per 100 Females:	25	19	
Juveniles per 100 Females	26	33	

Trend Based Objective ($\pm 20\%$)

1,900 (1520 - 2280)

Management Strategy:

Recreational

Percent population is above (+) or (-) objective:

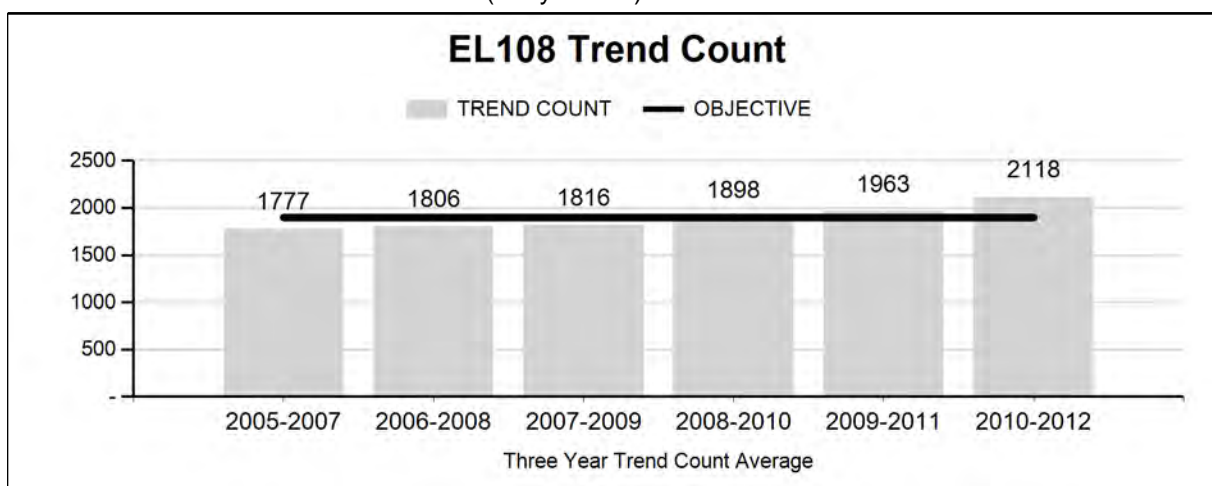
19%

Number of years population has been + or - objective in recent trend:

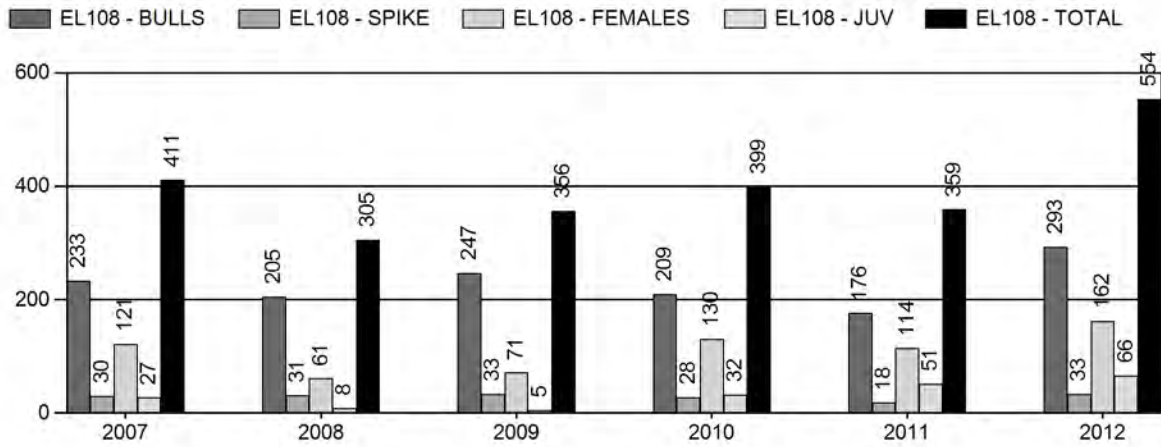
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Proposed harvest rates (percent of pre-season estimate for each sex/age group):

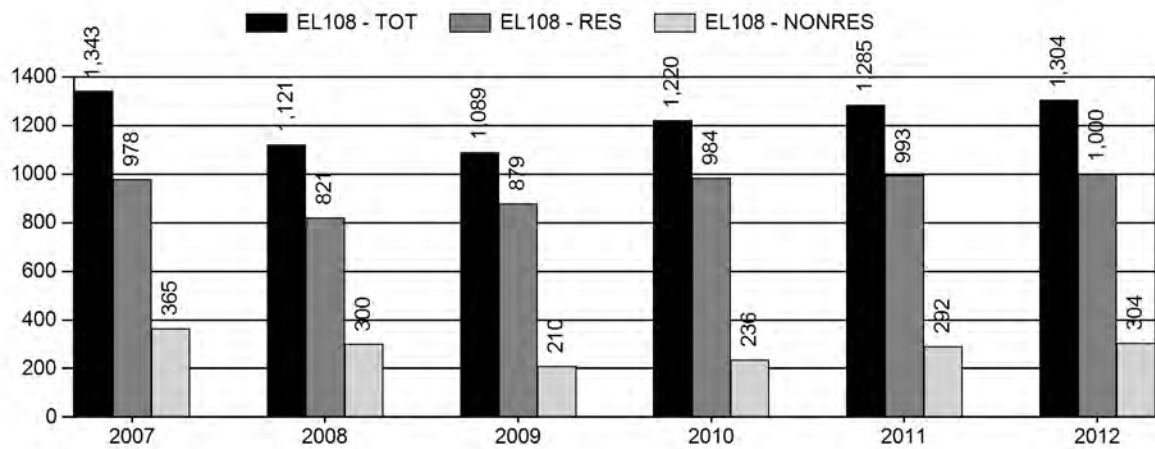
	<u>JCR Year</u>	<u>Proposed</u>
Females ≥ 1 year old:	0%	0%
Males ≥ 1 year old:	0%	0%
Juveniles (< 1 year old):	0%	0%



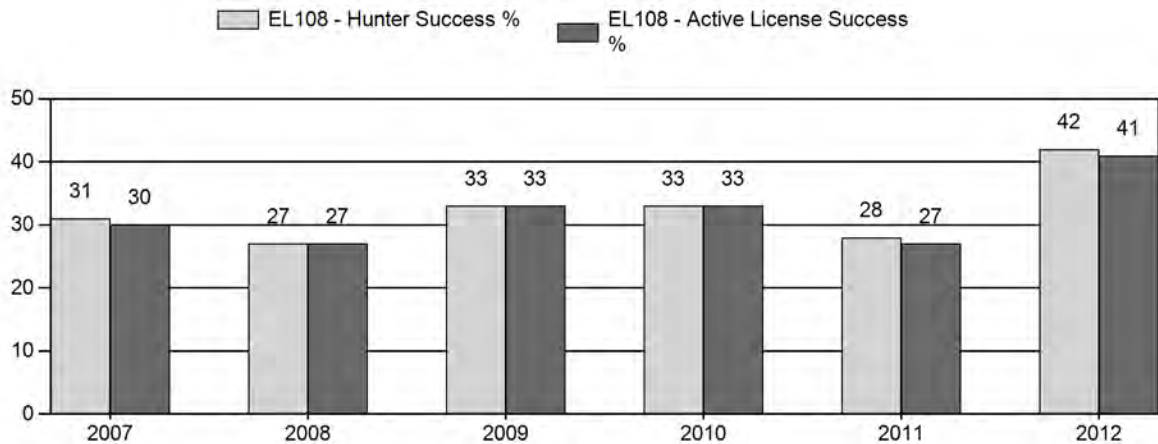
Harvest



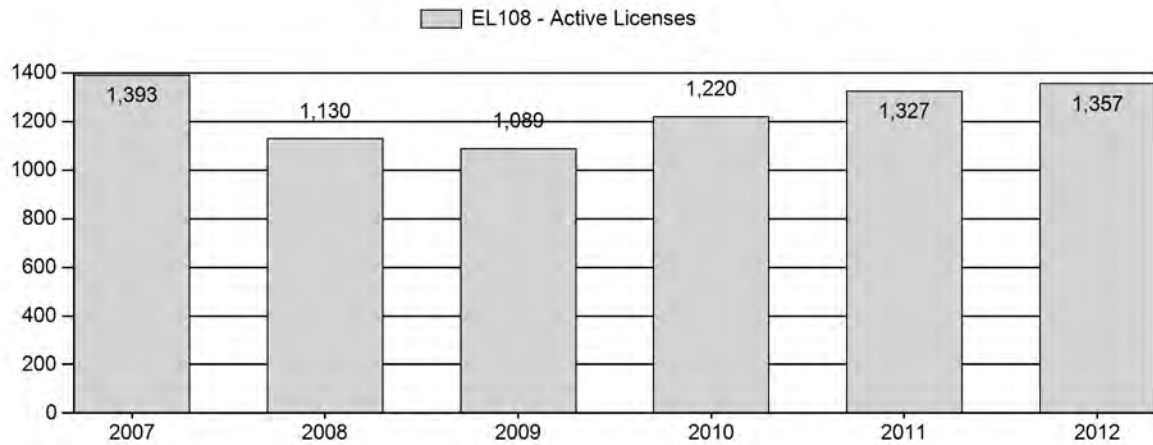
Number of Hunters



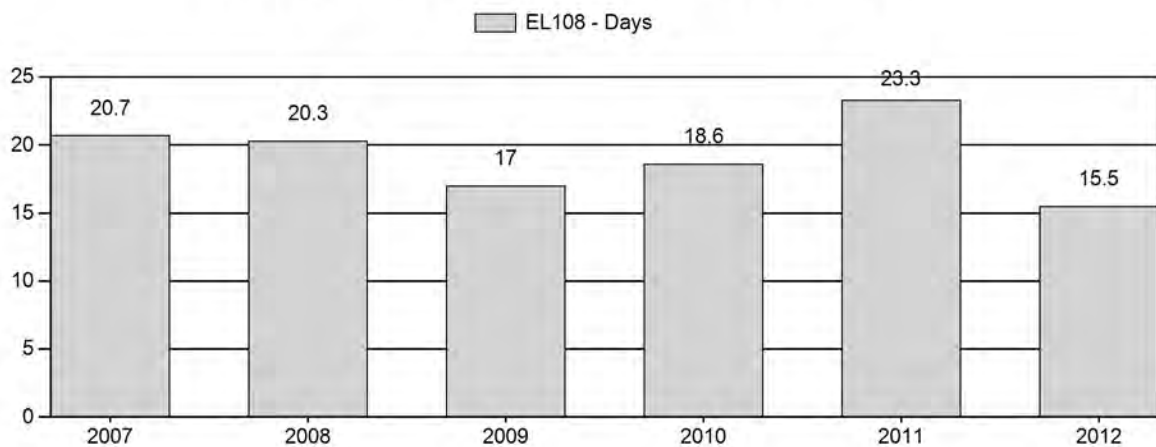
Harvest Success



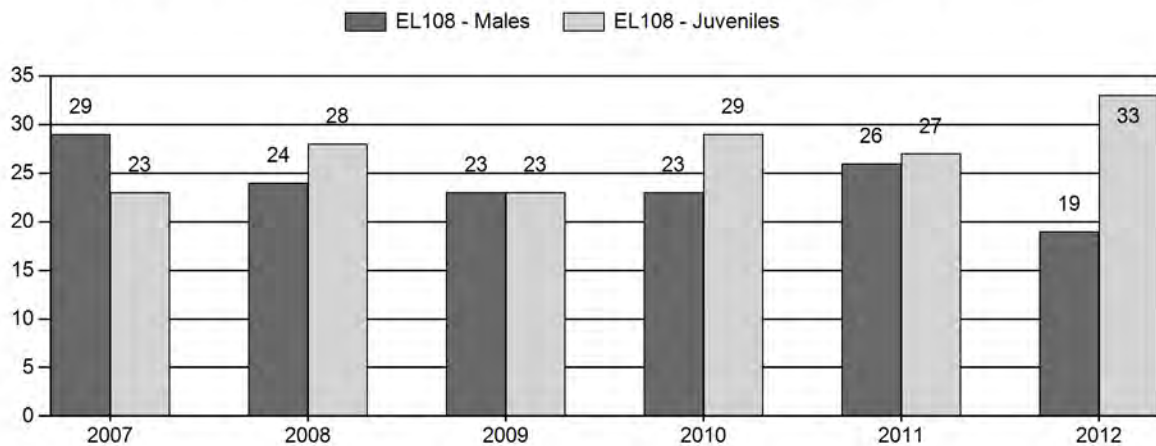
Active Licenses



Days per Animal Harvested



Postseason Animals per 100 Females



2007 - 2012 Postseason Classification Summary

for Elk Herd EL108 - PINEDALE

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot Cls	Cls Obj	Males to 100 Females				Young to		
		Ylg	Adult	Total	%	Total	%	Total	%			Ylg	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2007	1,741	103	208	311	19%	1,057	65%	246	15%	1,614	455	10	20	29	± 0	23	± 0	18
2008	2,006	102	193	295	16%	1,239	66%	351	19%	1,885	303	8	16	24	± 0	28	± 0	23
2009	1,980	90	187	277	16%	1,203	69%	273	16%	1,753	240	7	16	23	± 0	23	± 0	18
2010	2,000	102	186	288	15%	1,253	66%	366	19%	1,907	315	8	15	23	± 0	29	± 0	24
2011	2,168	144	219	363	17%	1,401	66%	374	17%	2,138	296	10	16	26	± 0	27	± 0	21
2012	0	120	149	269	13%	1,404	66%	457	21%	2,130	368	9	11	19	± 0	33	± 0	27

2013 Seasons – Pinedale Elk Herd Unit (EL108)

Hunt Area	Type	Opens	Closes	Quota	Limitations
97	Gen	Oct. 1	Oct. 15		General license; any elk
		Oct. 16	Nov. 15		General license; antlerless elk
	1	Sept. 20	Oct. 31	300	Limited quota; any elk
		Nov. 1	Nov. 15		Unused Area 97 Type 1 licenses valid for antlerless elk
	6	Sept. 20	Nov. 15	125	Limited quota; cow or calf elk
98	Gen	Oct. 1	Oct. 15		General license; any elk
		Oct. 16	Nov. 15		General license; antlerless elk
	1	Sept. 20	Oct. 31	350	Limited quota; any elk
		Nov. 1	Nov. 15		Unused Area 98 Type 1 licenses valid for antlerless elk
		Jan. 16	Jan. 31		Unused Area 98 Type 1 licenses valid for any elk on those lands enrolled in the Chimney Butte Hunter Management Area (HMA permission slip for ANY ELK required and limited)
	4	Sept. 20	Nov. 15	75	Limited quota; antlerless elk
	6	Sept. 20	Nov. 15	275	Limited quota; cow or calf elk
		Nov. 16	Jan. 31		Unused Area 98 Type 1, Type 4, and Type 6 licenses valid for antlerless elk in that portion of Area 98 between the Scab Creek and the East Fork River drainage, excluding Irish Canyon Creek and Muddy Creek Drainages.
Archery Seasons					
97,98		Sept. 1	Sept. 19		Refer to Section 3

Hunt Area	License Type	Quota Changes from 2012
97	6	+50
98	6	+100
Herd Unit Total	6	+150

Management Evaluation

Current Mid-Winter Trend Count Management Objective: 1,900

Management Strategy: Recreational

2012 Trend Count: 2253

Most Recent 3-year Running Average Trend Count: 2118

The Pinedale Herd Unit encompasses approximately 2,474 square miles of which only 522 square miles are considered occupied elk habitat. Only a small portion of this herd unit, located on the south end, is located in Sweetwater County, while the majority lies in Sublette County. Hunt Area 97 (Pinedale) and Area 98 (Boulder) make up the Pinedale Herd Unit. This herd unit is managed under a mid-winter trend objective of 1,900 ($\pm 20\%$) with a herd estimate derived from 3-year trend count average on feedgrounds and native range combined. This herd is managed under “recreational” management, with a management objective for bull: 100 cow ratio between 15 to 29.

Herd Unit Issues

Managers believe a very high proportion (90+ %) of elk are typically counted in this herd unit and are located on feedgrounds during the winter. This is an extremely “leaky” herd unit and as a result, a population model has not been successfully developed. The amount of elk movement from this herd unit makes simple hand calculations difficult, typically resulting in bull and calf ratios (modeled verses observed), which do not track well from one year to the next. Well over half of these Forest Service managed lands are designated as Wilderness (Bridger Wilderness) where access is limited to foot or horseback travel. The remaining Forest Service lands outside wilderness have moderate vehicle and trail access. Hunting opportunities for self-guided non-residents is limited in this herd unit because non-residents are required by law to have a licensed guide or outfitter while hunting in designated wilderness areas. Lack of public access on private lands in Area 98 along Scab and Silver Creeks provides a “refuge” for elk, continuing to limit harvest and compromising female elk harvest goals.

Weather

Three elk feedgrounds (Fall Creek, Scab Creek, and Muddy Creek) are located within this herd unit to winter animals that otherwise would not be able survive the harsh winter conditions. Feedgrounds also reduce depredation to stored hay and reduce risk of disease transmission to livestock (primarily brucellosis).

Habitat

Roughly 32 square miles of crucial native winter range have been identified in this herd unit, wintering roughly 100-150 elk in recent years. Since over 90% of the elk rely on supplemental feeding (feedgrounds) within this herd unit, winter and other seasonal habitats are not limiting herd dynamics.

Field Data

The 2012 elk trend count of 2,253 was higher than any of the past 10 years (Table 1). Snow conditions were below normal during 2012, resulting in elk foraging away from feedground locations on occasion, although over 90% of the elk were still counted on the three feedgrounds located within this herd unit (Table 1). The low trend count in 2009 was a function of mild winter conditions, resulting in a high proportion of elk on native winter habitats and lower elk detection rates on those native habitats during aerial surveys. Normally a low number of elk are documented on native range and managers believe that a high proportion (90+%) of animals are documented annually under normal winter conditions. With the exception of Halfmoon Mountain and surrounding areas, very few elk are typically documented on native winter ranges in the herd unit.

Table 1. Herd Composition Counts in the Pinedale Elk Herd Unit, 2003-2012.

Location	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Fall Creek F.G	547	438	506	529	494	527	0	554	655	675
Scab Creek F.G	710	825	810	750	776	754	600	780	806	912
Muddy Creek F.G.	486	396	431	383	376	510	422	467	557	522
N.W.R.	<u>75</u>	<u>61</u>	<u>111</u>	<u>96</u>	<u>68</u>	<u>154</u>	<u>766</u>	<u>161</u>	<u>120</u>	<u>144</u>
Herd Unit Total	1818	1720	1858	1758	1714	1944	1788	1962	2138	2253

Herd composition counts in 2012 documented a bull:cow:calf ratio of 19:100:36. Compared to 2011 (26:100:27), the bull ratio declined while the calf ratio increased. The previous 5-year average bull:cow:calf ratio was 25:100:26, similar to that observed in 2011, but significantly different in 2012.

Harvest Data

The harvest survey reported approximately 550 total elk taken in 2012, a significant increase from approximately 350 in 2011 and 400 in 2010. The 2008 and 2009 hunting seasons were designed to significantly reduce cow/calf harvest levels to compensate for removal of brucellosis sero-positive female elk during a Test and Removal Pilot Project conducted at all three Pinedale herd unit feedgrounds. Seasons were modified in 2010 to increase female harvest opportunities by adding Type 4 and Type 6 licenses, and allowing general license hunters to harvest “any” elk instead of “antlered” elk, which doubled female harvest in 2010. The combination of mild temperatures and little moisture during the 2011 hunting season contributed to the poor harvest, as seasons were designed to increase female harvest. During the 2012 hunting season it took an average of 15 days to kill an elk with a 41% success rate. During the previous 5 years, hunter effort and success has averaged 20 days/animal harvested and 30% success.

Population

Starting in 2012, a mid-winter trend count will be utilized to manage this herd unit instead a hand-derived population model estimates. This is a “leaky” herd unit and as a result, a functional computer simulation model has not been developed. The mid-winter trend objective for this herd

is 1,900 elk ($\pm 20\%$). The 2010-2012 3-year trend average is 2,118 elk, which is within this herd objective.

Management Summary

This herd unit declined from 2004-2007, recovered during 2008, stabilized somewhat in 2009 and 2010, and increased in 2011 and 2012. Recent counts indicate bull:cow:calf ratios are adequate, although the bull ratio dropped in 2012, corresponding with the highest bull harvest reported in the last 10 years. With season modifications aimed at reducing female harvest during 2008 and 2009, along with lower than expected Test and Slaughter removal of female elk, this herd has remained near the desired population objective of 1,900. With the termination of the Test and Slaughter Program after the 2009-2010 winter, hunting seasons were liberalized to increase harvest opportunities during 2010 -2012. Documented elk numbers have continued to increase during recent years and additional female harvest is needed to keep this herd unit within management objectives. In addition bull harvest increased in 2012 accounting for 59% of the overall harvest.

The 2013 seasons are designed to increase female harvest while reducing opportunities for bull harvest. Limited quota, Type 1 "any" elk licenses in Area 97 will remain at 300 licenses, although the demand for these licenses has been below this level in recent years attributed to limited harvest opportunities outside the Bridger Wilderness. The season length for limited quota Type 1 licenses will remain the same (Sept. 20 – Nov. 15), valid for antlerless elk from Nov 1. – Nov. 15. An increase to 125 (+50) Type 6 licenses will be available, valid from Sept. 20 – Nov. 15 for antlerless elk.

In Area 98, the quota and season length for Type 1 licenses ($n=350$) will remain the same (Sept. 20 – Nov. 15), valid for antlerless elk from Nov 1. – Nov. 15. Limited quota, Type 4 licenses will remain at 75 and Type 6 licenses will increase to 275(+100) with a Sept. 20 – Nov. 15 season. Similar to past years, further antlerless harvest opportunities will be provided for unused limited quota licenses (Type 1, 4, and 6) from Nov. 16 – Jan 31 between Scab Creek and the East Fork Drainage to address damage and cattle co-mingling issues. As in 2012, a very limited number of hunters will have an opportunity to harvest bulls from Jan. 16 – Jan. 31 on those lands enrolled in the Chimney Butte HMA to address damage concerns from bull elk on private lands.

Changes were made for General license seasons in both Area 97 and 98 in 2013. From Oct. 1 – Oct. 15 (instead of Oct. 31) General licenses will be valid for "any" elk. From Oct. 16 – Nov. 15 General licenses will be valid for "antlerless" elk

The hunting seasons for 2013 should result in the harvest of approximately 240 bulls, 250 cows, and 50 calves for a total harvest of 540 elk. This season should result in a postseason 2013 trend count estimate of approximately 2,100 elk.



E108 - Pinedale
HA 97, 98
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 Parturition Area

